Final

AVOCET ENERGY STORAGE SYSTEM PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for
City of Carson

June 2024

ESA

EXHIBIT NO. 5

Final

AVOCET ENERGY STORAGE SYSTEM PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for
City of Carson
Contact: McKina Alexander, Senior Planner
701 East Carson Street
Carson, CA 90745
310.952.1761
malexander@carsonca.gov

June 2024

626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
esassoc.com

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Initial Study/Mitigated Negative Declaration

Figures

Tables

Appendices

This page intentionally left blank

CHAPTER 1
Introduction

1.1 Project Details

1. Project Title: Avocet Energy Storage System Project

2. Lead Agency Name and Address: City of Carson
Community Development Department
701 East Carson Street
Carson, CA 90745

3. Contact Person and Phone Number: McKina Alexander, Senior Planner
(310) 952-1761 x1326

4. Project Location: 23320 Alameda Street
Carson, CA 90746

5. Project Sponsor's Name: Avocet Energy Storage, LLC

6. General Plan Designation(s): Heavy Industrial (project site and portion of gen-tie route located within City of Carson). Industrial – Light Manufacturing (portion of gen-tie route located within City of Los Angeles). OS (Open Space) (SCE Hinson Substation located within City of Long Beach).

7. Zoning: MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay (project site and portion of gen-tie route located within City of Carson). M3-1 (Heavy Industrial Zone) (portion of gen-tie route located within City of Los Angeles). PR (Public Right-of-Way) (SCE Hinson Substation located within City of Long Beach).

8. Description of Project:

The Avocet Energy Storage Project (proposed project) is located on a 6.96-acre site at 23320 Alameda Street (project site) in the City of Carson (City). The proposed project includes the development of an approximately 200-megawatt battery energy storage system (BESS) located within the project site. The proposed project would consist of lithium-ion batteries (or similar

technology available at the time of construction) installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, and other associated equipment to interconnect into the Southern California Edison (SCE) Hinson Substation. The containers or enclosures would have battery storage racks, with relay and communications systems for automated monitoring and management of the batteries to ensure design performance. A battery management system would be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Batteries operate with direct current (DC) electricity, which must be converted to alternating current (AC) for compatibility with the existing electric grid. Power inverters to convert between AC and DC, along with transformers to step up the voltage, would also be included. The generation transmission line (gen-tie line) would interconnect the proposed project to the existing SCE Hinson Substation. The proposed gen-tie route would cross three jurisdictions including: the City of Carson, the City of Los Angeles, and the City of Long Beach. The proposed project would provide a service to the regional electric grid by receiving energy (charging) from the SCE electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the point of interconnection (SCE Hinson Substation). SCE would install one tubular steel pole (TSP) approximately 130 feet tall with approximately a 12-foot wide by 30-foot-deep foundation. SCE would install a bundled 1590 thousand circular mils (KCMil) conductor from the SCE Hinson Substation rack position to the new SCE-owned TSP and span to the customer-owned point of change of ownership (POCO) TSP. The gen-tie line and SCE features and upgrades to the existing SCE Hinson Substation are collectively referred to as project-related offsite improvements.

The project site includes one parcel, APN 7315-020-022, located within the City of Carson. The project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) (City of Carson 2017) with a General Plan land use designation of Heavy Industrial (City of Carson 2023). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone) with a General Plan land use designation of Industrial – Light Manufacturing. The SCE Hinson Substation is zoned PR (Public Right-of-Way) (City of Long Beach 2021) with a General Plan land use designation of OS (Open Space) (City of Long Beach 2019). Per the Land Use Element of the City General Plan, the Heavy Industrial land use designation is intended to provide for the full range of industrial uses that are acceptable within the community, but whose operations are more intensive and may have nuisance or hazardous characteristics that for reasons of health, safety, environmental effects, or general welfare are best segregated from other uses (City of Carson 2023). A BESS is similar in nature and purpose to the Transportation, Communications, and Utilities and Public Service uses identified in the City Code of Ordinances Section 9141.1, Uses Permitted in Industrial Zones (Service yard – public utility or public service) that are a permitted use within Manufacturing – Heavy Zones (City of Carson 2020).

9. Surrounding Land Uses and Setting:

The project site consists of approximately 6.96 acres in the City of Carson, California (see **Figure 1, Project Site and Regional Location**). The project site is located in the eastern portion of the city, east of South Alameda Street and north of East Sepulveda Boulevard, as shown in Figure 1. The project site is approximately 0.95 miles south of Interstate 405 and is bordered by

Alameda Street to the west, industrial uses to the north and south, and the Dominguez Flood Control Channel (Dominguez Channel) to the east. The project site is in an area characterized by a mix of industrial uses and is currently developed as an aggregate recycling center. The SCE Hinson Substation or point of interconnection is located approximately 0.62 miles to the northeast in the City of Long Beach.

10. Project Objectives:

The proposed project and project-related offsite improvements would provide the City of Carson and the State of California with a reliable and economically attractive commercial development to receive, store, and discharge electricity from the CAISO-controlled electric grid, including renewable energy produced by existing solar and wind resources in the region. Construction of the proposed project and project-related offsite improvements will accomplish the following:

- Establish a new energy storage facility to reliably capture and manage renewable energy in an economically feasible and commercially financeable manner.
- Provide economic benefit to the City, the region, and the state, through construction jobs, property and sales taxes, construction and maintenance services, and increased energy efficiency and reliability.
- Use a proven and established energy storage technology that is efficient, has low maintenance requirements, and is recyclable.
- Assist California in meeting its greenhouse gas emissions reduction goals by 2020 and 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32 in 2016.
- Assist California in achieving its switch away from fossil-fueled generation by allowing renewables to be stored and discharged back to the market when necessary.

11. Other public agencies whose approval is required:

The City of Carson as the lead agency (per California Environmental Quality Act (CEQA) Guidelines Section 15050) for the proposed project has discretionary responsibility for the proposed project. To implement the proposed project, the proposed project may need to obtain discretionary and ministerial permits/approvals including, but not limited to the following:

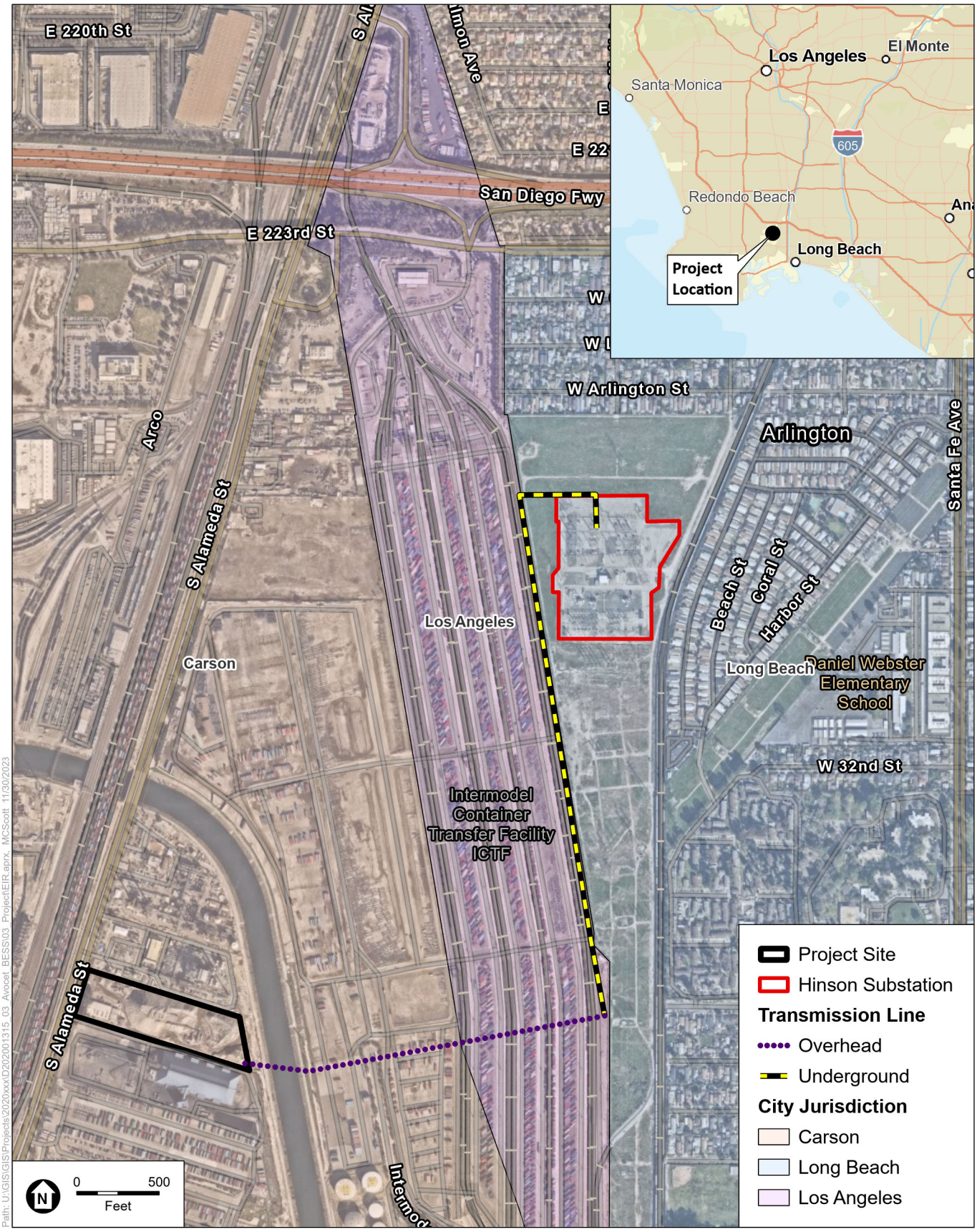
- Conditional Use Permit
- Design Overly Review
- Development Agreement
- National Pollution Discharge Elimination System (NPDES) Construction General Permit
- General Construction Stormwater Permit
- Grading and building permits
- Demolition Permit

The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other

additional permits or approvals from responsible agencies may be required for the proposed project and project-related offsite improvements.

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

The City notified appropriate tribes regarding Assembly Bill (AB) 52 and Senate Bill (SB) 18 consultation). Refer to Section XVIII, *Tribal Cultural Resources*, for additional information.



SOURCE: ESRI, 2022

Avocet Energy Storage Project

Figure 1
Project Site and Regional Location

1.2 Environmental Factors Potentially Affected

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

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

1.3 Determination

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

Signature _____ Date _____

CHAPTER 2
Project Description

2.1 Project Overview

The proposed project is an approximately 200-megawatt BESS consisting of lithium-ion (or similar technology available at the time of construction) batteries installed in racks, inverters, MV transformers, switchgear, a collector substation, and other associated equipment to interconnect into the SCE Hinson Substation. The BESS enclosures would be approximately 10 feet in height and the on-site collector substation would have a maximum height of 40 feet. The proposed project would include a gen-tie line to interconnect the project to the existing SCE Hinson Substation. The proposed gen-tie route is further described below. The gen-tie route would cross three jurisdictions including: the City of Carson, the City of Los Angeles, and the City of Long Beach. The proposed project would provide a service to the regional electric grid by receiving energy (charging) from the SCE electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the point of interconnection (SCE Hinson Substation).

Based on the analysis and conclusions provided below, the City has determined this Initial Study/Mitigated Negative Declaration (IS/MND) serves as the appropriate environmental documentation in accordance with the California Environmental Quality Act (CEQA) Guidelines to demonstrate the potential environmental impacts associated with the construction and operation of the proposed project and project-related offsite improvements.

2.2 Project Location and Existing Setting

The project site is located east of South Alameda Street and north of East Sepulveda Boulevard at 23320 Alameda Street in the City of Carson, California, Los Angeles County. The project site is approximately 6.96 acres (approximately 303,178 square feet) and includes Assessor's Parcel Number (APN) 7315-020-022. The project site is currently developed as an aggregate recycling center, consisting of a single-story, approximately 11,600-square-foot administrative building and an equipment storage building, with the remainder of the site being used for concrete and asphalt crushing, shipping, and receiving activities. The project site was previously partially developed with several structures associated with hydrogen gas plant operations being conducted on the northern adjoining property. The hydrogen plant operated until the 1990's and all structures on the project site were demolished, with the exception of the existing single-story building.

The project site is in an area characterized by a mix of industrial uses. Current uses adjoining the project site include an oil refinery to the north, the Dominguez Channel to the east, and a coke

(petroleum) storage facility to the south. Alameda Street borders the project site to the west, with the Union Pacific Railroad (UPRR), and the former ARCO refinery, now known as the Marathon Los Angeles Refinery, beyond. The project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) (Carson 2017) with a General Plan land use designation of Heavy Industrial (Carson 2023). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone) with a General Plan land use designation of Industrial – Light Manufacturing. The SCE Hinson Substation located within the City of Long Beach is zoned as PR (Public Right-of-Way Zone) (City of Long Beach 2021) with a General Plan land use designation of OS (Open Space) (City of Long Beach 2019). The proposed gen tie route also crosses over City-owned Intermodal Way.

2.3 Project Site History

The project site was vacant and undeveloped from as early as 1896 to as last as 1963. Around 1964, the project site was partially developed with several structures associated with hydrogen gas plant operations being conducted on the northern adjoining property. The hydrogen plant operated until the 1990s and was subsequently closed and the structures were demolished. As part of the hydrogen plant closure, the present-day parcel was subdivided from the northern adjoining property parcel and structures on the project site were demolished with the exception of the present-day building. The project site was redeveloped for use as a concrete recycling facility (NV5 2021).

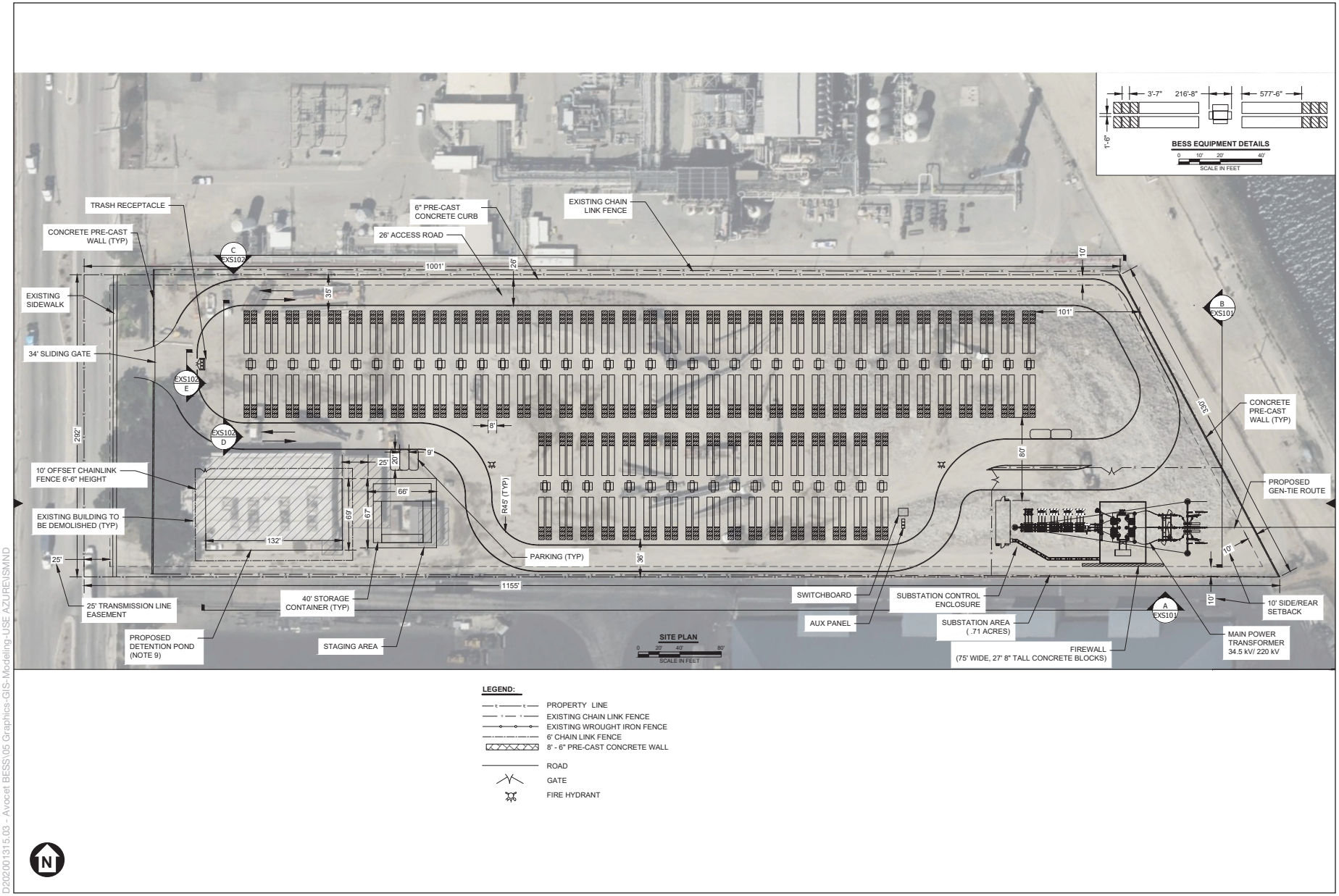
Land uses along the gen-tie route include rail lines constructed in the 1940s and utilized by the military as part of the Wilmington Classification and Hold facility, a loading and storage area for military equipment awaiting shipment. By the 1950s, several small commercial structures were constructed west of the gen-tie route along Alameda Street, as well as the Dominguez Channel. In the 1960s, the western adjoining property to the gen-tie route was developed with a hydrogen plant, a drag strip (automotive racetrack) was constructed along the central portion of the gen-tie route, and the electrical substation and associated transmission lines were constructed along the eastern portion of the gen-tie route. In the 1980s, the present-day ICTF Intermodal Terminal (rail and tractor trailer yard) was constructed near the central and eastern portions of the gen-tie route. In the 1990s and early 2000s, the hydrogen plant on the western adjoining property to the gen-tie route was demolished and replaced with the present-day concrete recycling facility (NV5 2023).

2.4 Project Characteristics

The proposed project and project-related offsite improvements includes the development of energy storage facilities and associated infrastructure. The battery packs would be housed in enclosures consisting of modular battery units, as shown in **Figure 2, Site Layout Plan**. Power released or captured by the proposed project would be transferred to and from the existing SCE Hinson Substation via a gen-tie line. The proposed project would include the installation of lithium-ion (or similar technology available at the time of construction) batteries, which would be installed in racks; inverters; MV transformers; switchgear; a collector substation; and other associated equipment. The major components of the proposed project and project-related offsite improvements are as follows:

- Energy Storage Facility: Energy storage enclosures and appurtenances would be constructed that would provide energy storage capacity and dispatch for the electric grid.
- Power Inverters and Transformers: Power inverters to convert between AC and DC would be included, along with transformers that would step up the voltage.
- Collector Substation: A collector substation would be installed that would include the open rack, air-insulated switch gear, and the main power transformer to step up from 34.5 kilovolts (kV) to 220 kV.
- Telecommunication Facilities: Telecommunication equipment, including underground and overhead fiber optics or supervisory control and data acquisition (SCADA) would be installed.
  - The project would include two fiber communication circuits (Route 1 and Route 2) linking the BESS generation facility with the existing SCE Hinson Substation communications network for the purpose of communication for protection circuits, BESS telemetry data, and other data for monitoring. The dual fiber circuits (Route 1 and Route 2) would be constructed with overhead and underground facilities, including overhead poles, underground manholes, pull boxes, conduits, and fiber. Route 1 and Route 2 would be located between the SCE Hinson Substation mechanical electrical equipment room (MEER) building and the manhole location on Union Pacific Railroad's (UPRR's) property.
- Site Access and Security: On-site access driveways, perimeter security fencing, and nighttime directional lighting would be provided for the project.
- Operations and Maintenance Storage Area: An operations & maintenance (O&M) storage area would be located in the western portion of the project site. The area would house equipment and materials necessary to complete O&M activities.
- Gen-Tie Line: A single 220 kV gen-tie line would be constructed to transfer power between the SCE Hinson Substation and the project. The gen-tie line route as shown in **Figure 3, Gen-Tie Line Route**, would traverse the cities of Carson, Los Angeles, and Long Beach to connect to the existing SCE Hinson Substation.
  - SCE would install one TSP approximately 130 feet tall with approximately a 12-foot wide by 30-foot-deep foundation. SCE would install a bundled 1590 KCMil conductor from the SCE Hinson Substation rack position to the new SCE-owned TSP and span to the customer-owned POCO TSP.

The facilities are intended to operate year-round and would be available to receive or deliver energy 24 hours a day and 365 days a year.



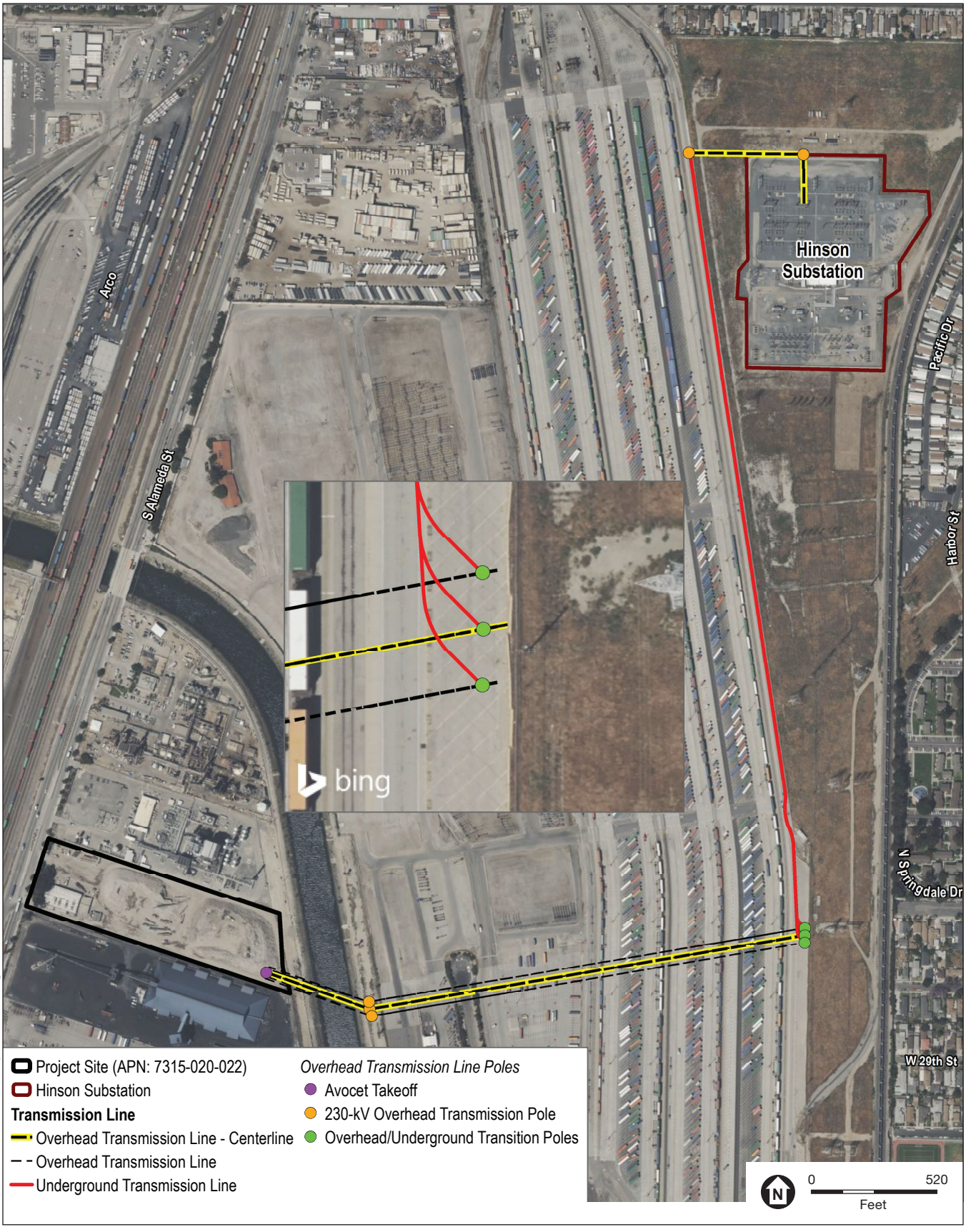
D2020013 15.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 2
Site Layout Plan

ESA



D2022001315.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Dudek, 2023

Avocet Energy Storage Project

Figure 3
Gen-Tie Line Route

ESA

2.4.1 Energy Storage Facility

Battery Energy Storage System Enclosures

The proposed battery packs would be housed in containers or purpose-built enclosures, as shown in **Figure 4, BESS Enclosure Rendering**. As shown in **Figure 5, North and West Elevations**, and **Figure 6, South and East Elevations**, the enclosures would be approximately 10 feet in height, with equipment placed on a 6-inch concrete pad. The BESS would be designed and installed in conformance with the nationally recognized National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems, along with all applicable State and City fire protection requirements. The BESS would be unstaffed, with remote operational control and periodic inspections and maintenance performed as necessary.

Batteries and Racks

The lithium-ion (or similar technology available at the time of construction) batteries would be housed in racks, similar to common computer server racks. The racks are typically made of aluminum but may be composed of steel. The battery racks would be designed and installed in accordance with the local seismic design requirements.

Fire Protection System

As described above, the proposed battery packs would be NFPA 855 Code compliant, Underwriter Laboratories (UL) Certified, and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules in the event of an emergency. The Los Angeles County Fire Department (LACFD) would review and approve the facility fire protection and suppression plans prior to project approval. The review and approval by the LACFD will cover all applicable design, construction, and testing requirements of the NFPA 855 Code.

Outdoor Electrical Equipment

MV transformers and additional electrical equipment would be installed outside the BESS enclosures. The collector substation would be located to the east of the BESS facility components, as shown in Figure 2, Site Layout Plan. Components would include a main power transformer, control house, and switchgear. Underground wires and cabling would run from the battery cable collection box (inside the enclosure) to a concrete pad housing the inverter and transformer. From the MV transformer, cabling would be run to the collector substation. All outside electrical equipment would be housed in the appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and screened from view to the extent possible, on all sides. All outside electrical cabling on the site will be run underground.

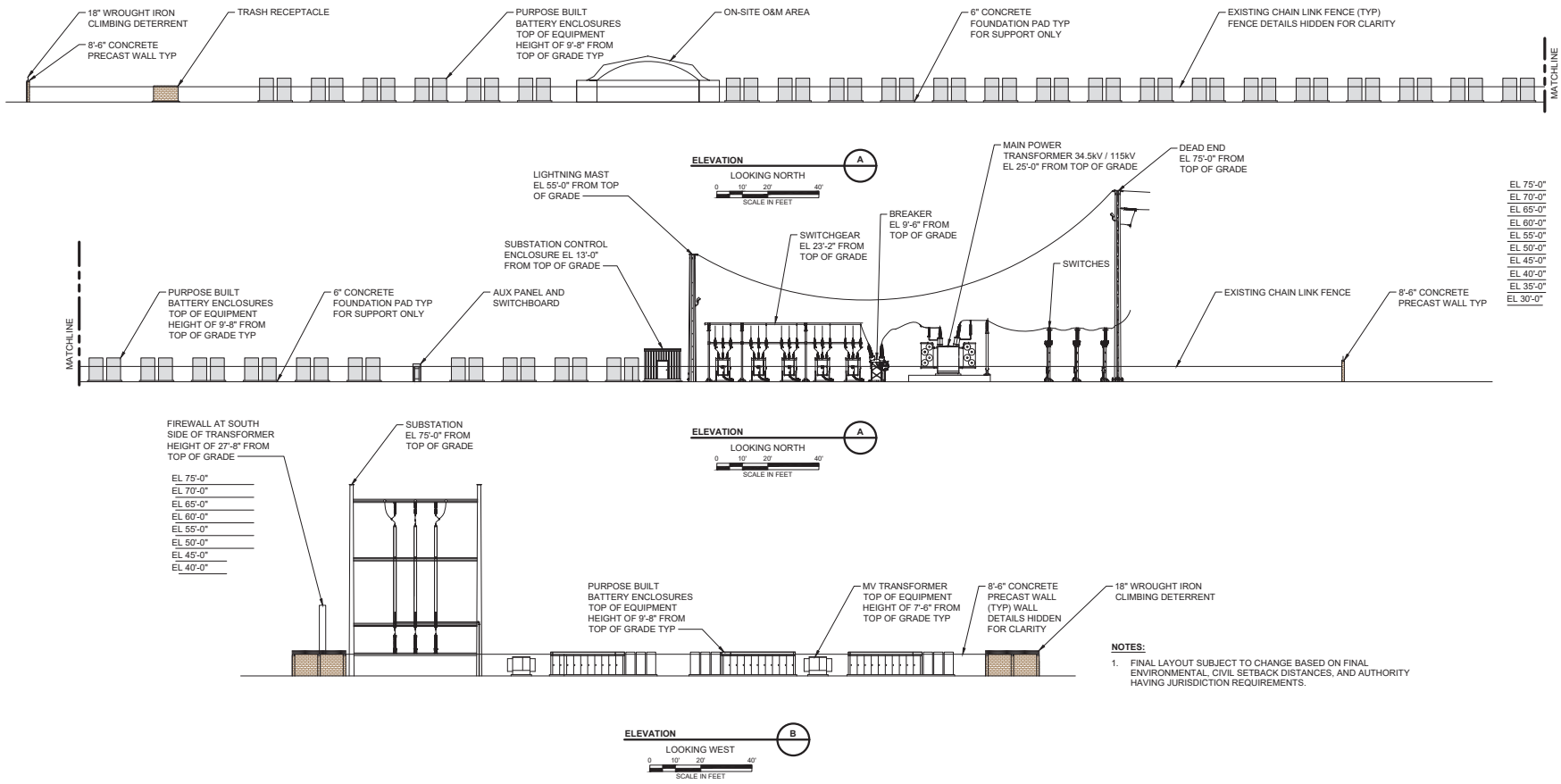
D2020013 15.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 4
BESS Enclosure Rendering

ESA



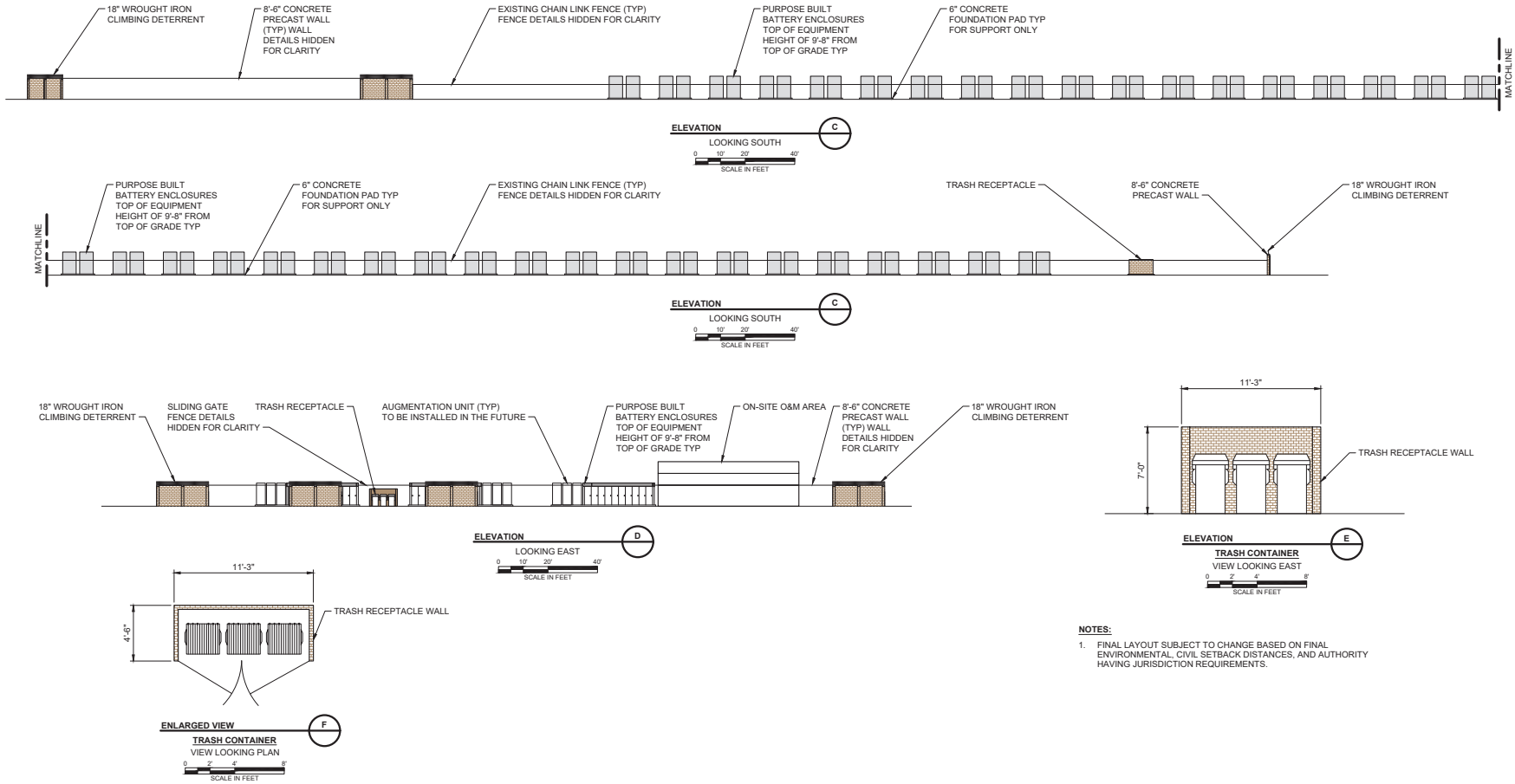
D202001315.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 5
North and West Elevations

ESA



SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 6
South and East Elevations

ESA

2.4.2 Power Inverters and Transformers

Industry-standard nationally recognized equipment would be installed as part of the proposed project and project-related offsite improvements. The power inverters would be unattended stand-alone units that operate in all conditions. Inverters operate in both a charge mode and a discharge mode and are monitored and controlled remotely. In the event of an emergency or unscheduled maintenance, on-site disconnects would be utilized. Power inverters and transformers are designed to be robust with an anticipated life-span of approximately 30 years with proper preventive maintenance, scheduled maintenance, and occasional major overhauls.

2.4.3 Collector Substation

The proposed collector substation would include an open rack, air-insulated switch gear, and the main power transformer to step up from 34.5 kV to 220 kV. The substation area is anticipated to be located in the southeast corner of the BESS area.

2.4.4 Telecommunication Facilities

The proposed project would require telecommunication facilities to meet the communication requirements for interconnecting and communicating with the SCE/ California Independent System Operator (CAISO) facilities and to support remote project operations monitoring. To provide for communication with SCE facilities, a fiber-optic cable would be used to connect the project site switchyard with the SCE point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The redundant fiber-optic cable would also be installed within the project footprint.

The project would use local exchange carrier services for telecommunication to support remote monitoring requirements. The project would connect to telecommunication fiber-optic lines owned and managed by local telecommunication providers.

2.4.5 Site Access and Security

The project site is accessible from various roadways. Interstate 405 is the largest highway in the area and provides regional access to the project site from the east and west. Access to the project site would be provided via the existing South Alameda Street. No new roads would be required to provide access to the project site. A paved 26-foot-wide internal access road would surround the BESS portion of the project site. The proposed project would include 5 parking spaces on site near the proposed operations & maintenance (O&M) storage area. The new SCE TSP would be installed adjacent to the existing transmission overhead structures with existing access paths. The SCE Hinson Substation can be accessed from multiple locations, with access during construction through an existing gate at the UPRR property to the east. For maintenance, access would be from Webster Avenue onto an existing dirt road traveling south along the east side of the SCE Hinson Substation and along the south side of the SCE Hinson Substation to the property on the west side.

All fence installation requirements would be evaluated, and the best-fit scenario would be incorporated into the project site based on the City’s final determination. Fences would be

installed around the perimeter of the project site for safety and security purposes. A wrought iron fence and access gate are proposed along the project frontage on South Alameda Street. The remainder of the site would be fully enclosed with a chain link fence. The fencing would remain in place for the life of the project.

Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation area and points of ingress/egress. Pursuant to City of Carson Municipal Code (CMC) Section 9127.1, all exterior lighting installed on the project site would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. Security cameras would be placed throughout the project site and monitored 7 days a week and 24 hours per day.

2.4.6 Operations & Maintenance Storage Area

An O&M storage area would be located in the western portion of the project site. The O&M storage area would be approximately 4,500 square feet in size and consist of 40-foot-long storage containers. The area would house equipment and materials necessary to complete O&M activities. The O&M storage area would be unmanned with no personnel facilities such as restrooms, showers, etc.

As shown on Figure 2, Site Layout Plan, a detention pond is proposed adjacent to the O&M storage area in the southwestern corner of the BESS area. The detention pond would temporarily store stormwater runoff to reduce runoff and erosion.

2.4.7 Generation Transmission Line

A gen-tie line would be constructed to transfer power to and from the proposed project and the existing SCE Hinson Substation. The proposed gen-tie route would extend approximately 1.10 miles, originating from the eastern side of the project site, crossing over the Dominguez Channel and UPRR facilities, then turning north and connecting to the northwest corner of the SCE Hinson Substation. The gen-tie line will be partially overhead and partially underground. The overhead portion of the gen-tie line will span from the project site to the east for approximately 0.45-mile, crossing over Dominguez Channel and UPRR facilities to the transition point. Two approximately 175-foot-tall transmission poles would be required for the overhead portion, which would not exceed Federal Aviation Administration Part 77 notification requirements which require notifying the Federal Aviation Administration for any construction or alteration exceeding 200 feet above ground level.

At the transition point, the gen-tie line would transition underground which would include up to three transition poles each up to 175 feet in height. The underground portion of the line would be located within a duct bank which is an underground reinforced concrete container used for laying utility lines such as electric and telecommunication cables. The cables themselves are enclosed in PVC conduits. Reinforced concrete placed around PVC conduits protects electrical cables from weather, seismic stress, corrosion, temperature extremes, and vandalism to prevent breakage and failure. The underground gen-tie line would run north from the transition point for approximately 0.65-mile and terminate at the Hinson Substation. The maximum trench widths and depths for the

underground gen-tie line would vary. Maximum trench width would be approximately 2'4" and maximum trench depth would be approximately 6'0" from existing grade.

2.4.8 Other Project Components

Southern California Edison Company Facility Upgrades

SCE identified a need for the proposed project to contribute its fair-share payment toward utility grid system upgrades that are planned to be completed within SCE's service territory, as well as the interconnection facilities at the SCE Hinson Substation needed to connect the proposed project. The proposed 220 kV gen-tie line would interconnect at the Hinson 220 kV rack. A 130-foot tall with approximately 12-foot wide by 30-foot wide deep foundation 220kV TSP would be installed that would span overhead to an SCE-owned TSP, which would terminate at a rack position within the SCE Hinson Substation, as shown in **Figure 7, Southern California Edison Company Facility Upgrades**.

SCE would equip the empty 220 kV switch rack position and associated facilities with the installation of two (2) circuit breakers, with associated structures and foundations; three (3) horizontally mounted disconnect switches with associated structures and foundations; one (1) horizontally mounted disconnect switch with grounding attachment and associated structure and foundation; one (1) line dead-end structure; one (1) line riser; three (3) coupling capacitor voltage transformers (CCVTs), pull boxes associated switches and terminal blocks, and secondary cables; three (3) station class surge arresters; bus supports; switch rack lighting; and two (2) Operator Interface Cabinet (OIC) on a new foundation and maintenance pad. The 220 kV South Operating Bus would be removed and replaced. Two new 19" relay racks (Z109 and Z306) and an overhead fiber optic plastic cable tray and off-ramp would be installed as part of the mechanical electrical equipment room (MEER) extension. Route 1 would consist of a new underground path for two conduits of telecom fiber of 3,000 linear feet from the SCE Hinson Substation MEER building to an SCE vault (meet-me vault). The meet-me vault would be on UPRR's property. The trench would be backfilled with slurry and native soil. Four pull boxes and a manhole would also be installed. For Route 2, SCE would install a new underground path for two conduits of telecom fiber of 200 linear feet from the SCE Hinson MEER to the manhole on UPRR's property. One manhole would be installed and backfilled with slurry and native soil. The existing DC switchboard would be removed from the existing control house and replaced with a new Main DC Switchboard DPM. New circuit breaker control and synchronizing switches, test switch and meter would also be installed.

Landscaping

As shown in **Figure 8, Landscape Plan**, approximately 10,073 square feet of the existing front yard landscaping would remain. In addition, approximately 4,019 square feet of the existing front yard planting beds would be rehabilitated with low water use climate adapted plants and 5 new trees would be planted to improve the streetscape and provide additional screening for the proposed project. The project's landscaping would comply with all City and State requirements.

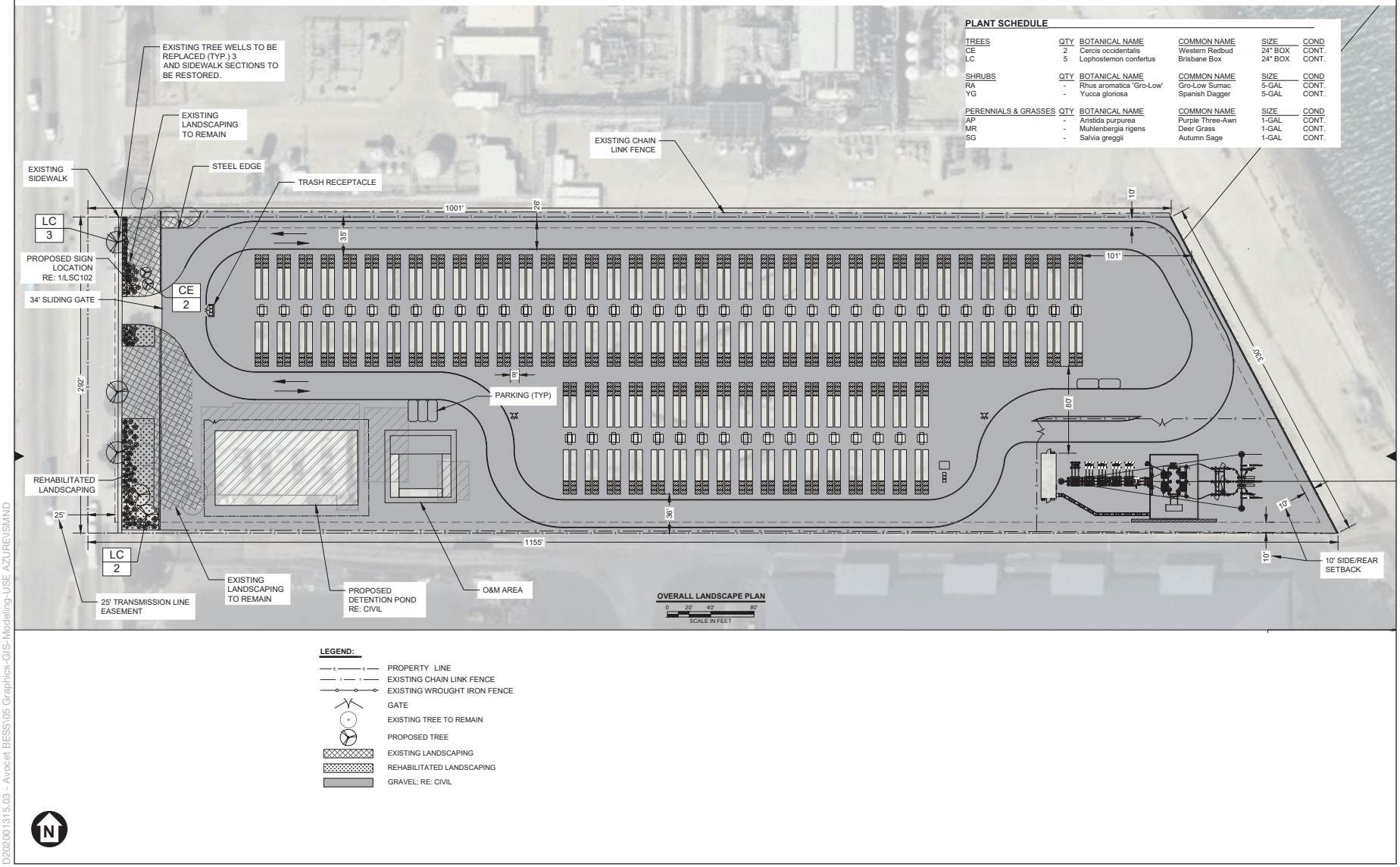
D2022001315.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Dudek 2024; Bing Maps 2024; Open Street Map 2024

Avocet Energy Storage Project

Figure 7
Southern California Edison Company Facility Upgrades

ESA



D20200131S.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 8
Landscape Plan

ESA

Solid Waste

The project would include a three-sided trash enclosure with a swing gate. The trash enclosure would be located near the project's northwestern boundary and would be approximately 4 feet, 6 inches in height and 5 feet, 4 inches in width.

Signage

Proposed signage would include an identifying sign along Alameda Street that would be approximately 8 feet long and 8 feet tall. The proposed sign would comply with all City requirements.

2.5 Project Construction

2.5.1 BESS Construction

Schedule and Workforce

Construction activities for the proposed BESS component would last up to 12 months and is anticipated to begin in March 2025. Construction activities for the project generally fall into three main categories: (1) site preparation; (2) system installation; and (3) testing, commissioning, and cleanup.

The on-site construction workforce is expected to peak at up to 75 individuals; however, the average daily workforce on site during construction is expected to be 50 individuals, comprising construction, supervisory, support, and construction management personnel. It is anticipated that the construction workforce would commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Deliveries of equipment and materials would generate an estimated five to seven roundtrips per day during peak construction periods.

The project would be constructed by several specialized construction contractors. Construction would primarily occur during daylight hours, Monday through Saturday between 7 a.m. and 6 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule would be coordinated with the appropriate agencies and would conform to City regulations.

Site Grading and Earthwork

Construction activities would include excavation and grading of the project site. Site preparation and construction would occur in accordance with all federal, State, and City zoning codes and requirements. Noise-generating construction activities would be limited to Monday through Saturday between 7 a.m. and 6 p.m. except legal holidays. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent feasible.

All applicable federal, State, and local requirements and best management practices (BMPs) would be incorporated into the construction activities for the project site. Beginning work on the

project site would involve preparing the land for installation of the BESS-related infrastructure, access driveways, and temporary construction staging areas. Site preparation would involve the distribution of existing on-site aggregate material across the BESS area, as shown in **Figure 9, Grading Plan**. Excess debris would be removed and properly disposed. Dust-minimizing techniques would be employed, such as placement of wind control fencing, application of water, and application of dust suppressants. Conventional grading would be performed throughout the project site but minimized to the maximum extent possible to reduce unnecessary soil movement that may result in dust. The proposed BESS would require excavation up to a maximum depth of 6 feet below ground surface (bgs), the main power transformer would require excavation up to a maximum depth of 5 feet bgs, and the gen-tie poles would require excavation up to a maximum depth of 50 feet bgs. Earthworks scrapers, excavators, dozers, water trucks, paddlewheels, haul vehicles, and graders may all be used to perform grading. 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. Soil movement from grading would be balanced on site.

Trenching for the SCE telecommunications conduit of 18 inches wide by 3-feet deep would be required for placement of underground electrical and communication lines, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. After preparation of the site, the pads for enclosures, equipment enclosures, and equipment vaults would be prepared pursuant to geotechnical engineer recommendations. The substation area would have a grounding grid installed and would be covered with aggregate surfacing for safe operation.

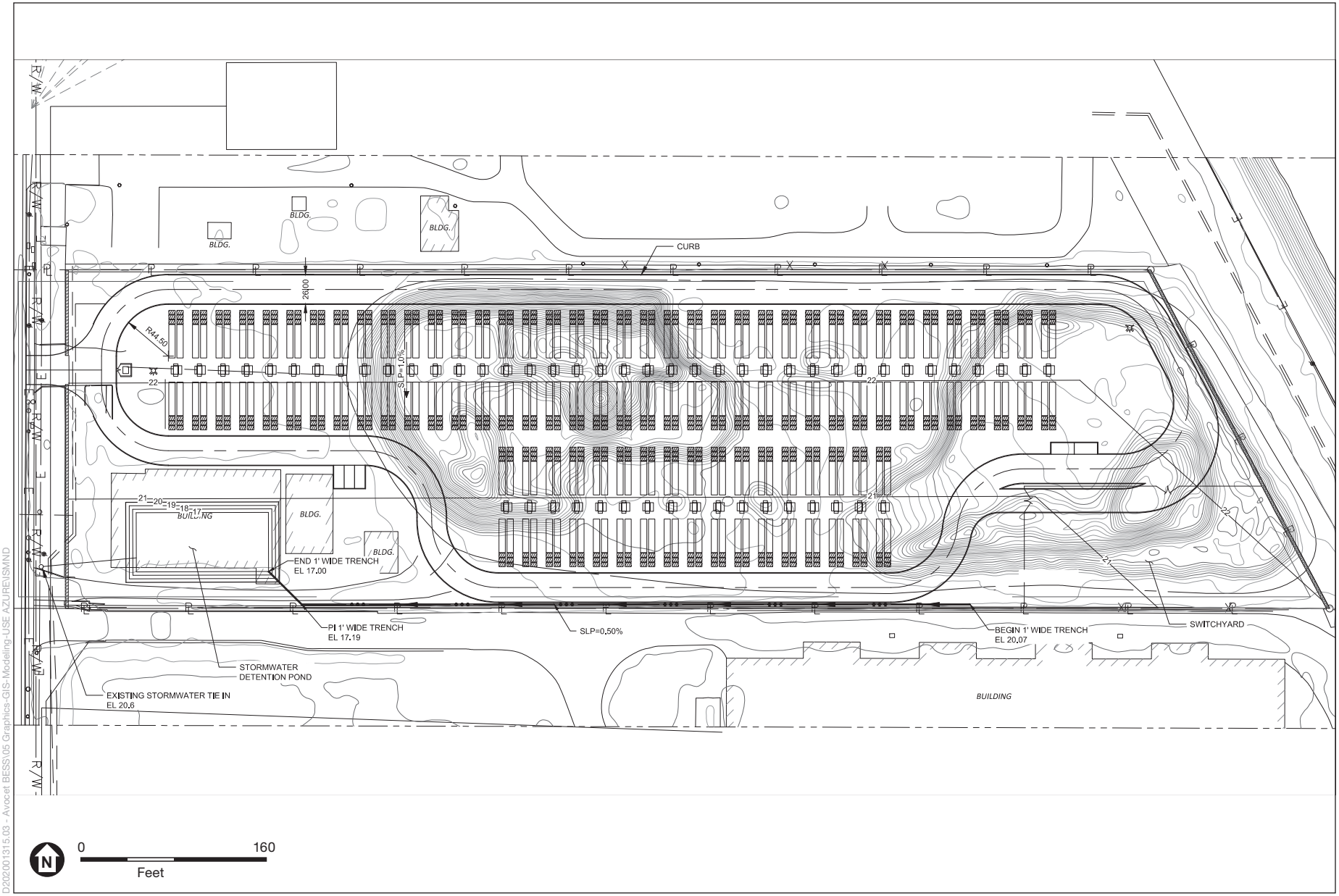
During construction, crews would be working on the site with various equipment and vehicles, including vehicles for transporting the batteries and other equipment. As the BESS enclosures are constructed, the electrical collection and communication systems would be installed. The wiring would connect to the appropriate electrical and communication terminations and the circuits would be checked and commissioned prior to operation. It is estimated that construction activities would require the equipment listed in **Table 1, Construction Equipment**.

Demolition of Existing Buildings

There is an existing administrative and storage building located in the southwest corner of the project site that would be demolished prior to construction of the BESS. The building is approximately 11,600 square feet.

Generation Transmission Line

Construction of the 220 kV gen-tie line would take approximately 3 months to complete. The workspace would be limited to within the road right-of-way and/or franchise position, and a permit application would be submitted to the respective City jurisdictions (City of Long Beach and City of Los Angeles) under a separate cover. Construction of the underground portion would consist of horizontal directional drilling, jack-and-bore drilling, or open trenching. All areas disturbed during construction will be returned to pre-construction conditions.



D20200131S.03 - Avocet BESS\05 Graphics-GIS-Modeling-USE AZURE\SMND

SOURCE: Burns McConnell, 2023

Avocet Energy Storage Project

Figure 9
Grading Plan

ESA

TABLE 1
CONSTRUCTION EQUIPMENT

Equipment Type	Maximum Quantity
SCE Upgrades/Interconnection	
Civil Construction	
Forklift	1
Reach Lift	1
Snorkel Lift	1
Compactor	1
Dump Truck	1
Portable Generator	1
Excavator	1
Skip Steer	1
Electrical Construction	
Forklift	1
Reach Lift	1
Snorkel Lift	1
Truck Crane	1
Portable Generator	1
Excavator Drill	1
Reach Fork	1
Concrete Pump	1
Backhoe or Skid Steer	1
Dump Truck(s)	2
Crane	1
2-ton Crane	1
Bronto	2
Single Drum Puller	1
Fiber Optic (FO) Cable Construction	
Single Drum Puller	1
Backhoe	1
Dump Truck	1
Bucket Truck Posi Plus	1
BESS	
Site Preparation	
Grader	2
Rubber Tired Loaders	2
Skid Steer Loaders	2
Tractors/Loader/Backhoes	2

Equipment Type	Maximum Quantity
Collector Substation Site Preparation	
Rubber Tired Dozer	2
Tractors/Loaders/Backhoes	2
BESS Grading	
Graders	2
Plate Compactors	2
Rollers	2
Rubber Tired Loaders	2
Skid Steer Loaders	2
Tractors/Loaders/Backhoes	2
Collector Substation Grading	
Rollers	2
Rubber Tired Dozers	2
Tractor/Loader/Backhoes	2
Battery/Container Installation/Collector Substation Construction/Installation	
Air Compressor	2
Aerial Lift (man lift)	2
Bore/Drill Rig/	2
Cranes	2
Excavators	2
Generator Sets	2
Graders	2
Rubber Tired Dozer	2
Rollers	2
Skid Steer Loaders	2
Trencher	2
Tractors/Loaders/Backhoes	2
Plate Compactors	2
Gen-Tie Trenching	
Pumps	2
Skid Steer Loaders	2
Trencher	2
Tractors/Loaders/Backhoes	2
Gen-Tie Duck Bank and Vault Installation	
Aerial Lift	2
Cranes	2
Generator Sets	2
Skid Steer Loaders	2
Tractors/Loaders/Backhoes	2

Equipment Type	Maximum Quantity
Gen-Tie Jack-and-Bore	
Boring Jack Power Unit	1
Horizontal Boring Hydraulic Jack	1
Skid Steer Loaders	1
Tractors/Loaders/Backhoes	1
Welders	1
Gen-Tie Road Resurfacing and Clean-Up	
Pavers	1
Rollers	1
Skid Steer Loaders	1
Tractors/Loaders/Backhoes	1
Decommissioning	
Concrete/Industrial Saws	2
Cranes	2
Rubber Tired Dozers	2
Tractors/Loaders/Backhoes	2

The overhead portion of the line would be constructed per the standards set forth by California Public Utilities Commission (CPUC) General Order No. 95, Rules of Overhead Electric Line An aerial easement agreement with the City of Carson is required prior to construction. Construction as well as SCE structural design requirements, and the underground portion per CPUC General Order No. 128, Rules of the Construction of Underground Electric Supply and Communication Systems.

SCE Interconnection Construction

Civil construction for the SCE Hinson Substation interconnection would take up to seven months, beginning in August 2024, and would include grading, civil, equipment installation, wiring, and testing. Grading activities would include excavation, compaction, and drainage as needed. All substation construction activities would occur within the existing SCE Hinson Substation footprint. Construction vehicles would access the construction site from an existing asphalted main access road into the SCE Hinson Substation.

Following the completion of civil construction, electrical construction would begin. Electrical construction would take approximately two months to complete and would consist of steel structure erection, testing and installment of electrical equipment (switches, circuit breakers, etc.), installment of high voltage conductors, wiring and grounding, installment of year lights, and testing and installment of relays.

The proposed interconnection would be electrically served by the existing SCE Hinson Substation and BESS. Additionally, the project would construct a 220 kV TSP for connection to the existing SCE infrastructure. The pole would be approximately 130 feet in height with a 12-foot wide and

30-foot deep foundation. SCE would excavate and install the foundation for the SCE-owned TSP. The work would be performed by an SCE-approved contractor crew that would comply with all rules, regulations, and standards with inter-departments and other agencies while performing the construction phase. The project would utilize an existing laydown yard located southwest of the SCE Hinson Substation in an area approximately 150 feet by 200 feet. Vegetation has been removed, and soil compacted for a previous project and requires no further site preparation.

2.6 Project Operations

Typical operation and maintenance activities that would occur on the project site during operation include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication protocols; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security would be automated and monitored remotely. Periodic in-person inspections would be included as part of a security contract. The site would be unoccupied but would be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance as needed. Batteries and various components would be replaced or renewed as necessary to ensure optimal performance.

2.7 Project Decommissioning

At the end of the proposed project's operational term, the applicant may determine that the project site would be decommissioned and deconstructed, or the Project Applicant may seek an extension of the use permit. The proposed project would include measures to ensure the collection and recycling of batteries and to avoid the potential for batteries to be disposed of as municipal waste.

All decommissioning and site restoration activities would adhere to the requirements of the appropriate governmental authorities and be in accordance with all applicable federal, State, and City regulations. The facility would be decommissioned at the end of its useful life. Aboveground equipment that would be removed includes battery containers/enclosures, inverters, transformers, substation steel bus work and enclosures, electrical wiring, etc. Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including the fences and the concrete pads that may support the battery containers/enclosures, inverters, transformers, and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the decommissioning equipment being used. The area would be thoroughly cleaned, and all debris would be removed. A collection and recycling program would be implemented to promote recycling of project components and minimize disposal in landfills.

Removal of SCE's interconnection facilities and associated upgrades is not required upon decommissioning; they may be used for other purposes or removed depending on future needs.

2.8 Project Approvals and Discretionary Actions

The City of Carson as the lead agency (per California Environmental Quality Act (CEQA) Guidelines Section 15050) for the proposed project has discretionary responsibility for the proposed project. To implement the proposed project, the proposed project may need to obtain discretionary and ministerial permits/approvals including, but not limited to the following:

- Conditional Use Permit
- Design Overly Review
- Development Agreement
- National Pollution Discharge Elimination System (NPDES) Construction General Permit
- General Construction Stormwater Permit
- Grading and building permits
- Demolition Permit

Portions of the gen-tie line crossing the Dominguez Channel, which is under the jurisdiction of Los Angeles County Flood District, and UPRR facilities, would require confirmation or approval of related access and easement rights.

The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project and project-related offsite improvements.

CHAPTER 3
Environmental Checklist

I. Aesthetics

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
AESTHETICS— Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

a) The project site is located on one parcel within the City of Carson which is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. . There are no officially designated scenic vistas within the cities of Carson, Los Angeles or Long Beach (City of Carson 2023, City of Los Angeles 2021; City of Long Beach 2019). Furthermore, the project site and project-related offsite improvements are within an established built-up area characterized by a mix of industrial uses and open space. The proposed project and project-related offsite improvements would develop similar uses to those in the surrounding area. Therefore, no impacts to a scenic vista would occur.

b) According to the California Department of Transportation (Caltrans), there are no Officially Designated State or County Scenic Highways as defined by Caltrans, the County of Los Angeles, or any other local governing body adjacent to or within the vicinity of the project site or project-related offsite improvements (Caltrans 2021). Furthermore, there are no officially designated scenic vistas or scenic highways within

the cities of Carson, Los Angeles or Long Beach (City of Carson 2023, City of Los Angeles 2021; City of Long Beach 2019). Therefore, no impact to scenic resources within a State scenic highway would occur.

c) The project site and project-related offsite improvements are located partially within an urbanized area characterized by a mix of industrial uses and partially within an open space area. Current uses adjoining the project site include an oil refinery to the north, the Dominguez Channel to the east, and a coke (petroleum) storage facility to the south. Alameda Street borders the project site to the west, with the UPRR and the former ARCO refinery, now known as the Marathon Los Angeles Refinery, beyond. Implementation of the proposed project and project-related offsite improvements would result in a significant impact if the proposed project and project-related offsite improvements would conflict with applicable zoning and other regulations governing scenic quality.

The project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) (Carson 2017) with a General Plan land use designation of Heavy Industrial (Carson 2023). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone) with a General Plan land use designation of Industrial – Light Manufacturing. The SCE Hinson Substation located within the City of Long Beach is zoned as PR (Public Right-of-Way Zone) (City of Long Beach 2021) with a General Plan land use designation of OS (Open Space) (City of Long Beach 2019).The overhead portion of the gen-tie line would include transmission poles that would be up to 175 feet in height. The City of Carson's General Plan Land Use Element contains policies and regulations governing scenic quality and visual aesthetics for the City. However, there are no aesthetic related regulations regarding industrial development within the General Plan. Approval of the proposed project would require Site Plan and Design review to ensure that the proposed project does not conflict with applicable zoning and other regulations governing scenic quality. The proposed project would be required to comply with City's Industrial Zone Site Development Standards (CMC Section 9146), which contains building requirements for structures, frontages, and landscaping. As a result, the proposed project would be consistent with the CMC.

The proposed project and project-related offsite improvements would be consistent with the scale and massing of the surrounding industrial development. Under the proposed project, approximately 10,073 square feet of the existing front yard landscaping would remain. In addition, approximately 4,019 square feet of the existing front yard planting beds would be rehabilitated with low water use climate adapted plants and 5 new trees would be planted to improve the streetscape and provide additional screening for the proposed project. The proposed design of the BESS, gen-tie line, and existing landscaping would provide visual continuity within the area.

Therefore, based on the above, the proposed project and project-related offsite improvements would not conflict with zoning or regulations governing scenic quality and impacts would be less than significant.

d) The project site and project-related offsite improvements are located partially within an urbanized area currently developed with an aggregate recycling center where typical sources of glare include the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials. In addition, existing industrial uses surrounding the project site typically include nighttime security, wayfinding lighting, and light from outdoor sources, such as street lighting, parking lot lighting, building illumination, and vehicles. No light-sensitive residential uses are located immediately adjacent to the project site and project-related offsite improvements. The nearest light-sensitive residential land uses are approximately 2,650 feet west of the project site, 350 feet to the west of the gen-tie line, and 500 feet to the north of the existing SCE Hinson Substation connection point. Implementation of the proposed project and project-related offsite improvements would introduce new sources of nighttime lighting on the project site through installation of exterior light fixtures required for security and wayfinding. Pursuant to CMC Section 9127.1, and Long Beach Municipal Code (LBMC) Section 21.54.250, for the project components located in each respective jurisdiction, all exterior lighting installed on the project site would be directed away from all adjoining and nearby residential property and arranged and controlled so it would not create a nuisance or hazard to traffic or to the living environment. As such, all exterior lighting would be shielded and/or recessed to reduce light trespass (i.e., excessive or unwanted light generated on one property illuminating another property). Therefore, through compliance with local requirements, impacts associated with light and nighttime glare would be less than significant.

II. Agriculture and Forestry Resources

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
AGRICULTURE AND FORESTRY RESOURCES— In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a) The project site is located on one parcel that is currently developed as an aggregate recycling center. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. The project site and project-related offsite improvements are not zoned for agricultural uses and no agricultural uses or related operations are present on the project site, project-related offsite improvements, or in the surrounding urbanized and open space area. The project site and project-related offsite improvements are not located on designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (CDC 2022). Therefore, no impact would occur from conversion of Farmland to non-agricultural uses.

b) The project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) (Carson 2017). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone). The SCE Hinson Substation located within the City of Long Beach is zoned as PR (Public Right-of-Way Zone) (City of Long Beach

2021). No agricultural zoning is present in the project vicinity, and no nearby lands are enrolled under the Williamson Act (CDC 2017). The California Department of Conservation, Division of Conservation, Division of Land Resource Protection does not identify the project site and project-related offsite improvements as being protected by the Williamson Act (CDC 2017). As such, the proposed project and project-related offsite improvements would not conflict with existing zoning for agricultural uses, or a Williamson Act contract and no impact would occur.

c) As discussed previously, the project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) (Carson 2017). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone). The SCE Hinson Substation located within the City of Long Beach is zoned as PR (Public Right-of-Way Zone) (City of Long Beach 2021). The project site includes one parcel which is currently developed as an aggregate recycling center within an urbanized area. No forestland or timberland uses are located in the project site's urban setting or vicinity. Therefore, no impact would occur to zoning for forestland or timberland.

d) As discussed above, the project site and portion of the gen-tie route located within the City of Carson are zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay (Carson 2017). The portion of the gen-tie route located within the City of Los Angeles is zoned as M3-1 (Heavy Industrial Zone). The SCE Hinson Substation located within the City of Long Beach is zoned as PR (Public Right-of-Way Zone) (City of Long Beach 2021). No forestland or timberland uses are located at the project site or project-related offsite improvements or within the vicinity. Therefore, no impact would occur to forestland or timberland.

e) As discussed above, the proposed project and project-related offsite improvements would not involve changes to the existing environment that could result in the conversion of farmland or forestland and there are no farmland uses on or in the vicinity of the project site or project-related offsite improvements. Therefore, no impact would occur from a conversion of farmland to a non-agricultural use.

III. Air Quality

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
AIR QUALITY— Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion

Regulatory Background

a) The proposed project and project-related offsite improvements are located within the 6,745-square-mile South Coast Air Basin (Basin). Air quality planning for the Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. The Basin is subject to the SCAQMD's Air Quality Management Plan (AQMP), which was created to meet the to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions from stationary sources and on-road and off-road mobile sources and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP) and Guide and the Regional Transportation Program/Sustainable Communities Strategy (RTP/SCS), these plans provide the basis for the land use and transportation components of the AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP.[1] Both the RCP and AQMP are based, in part, on projections originating with County of Los Angeles and City of Carson general plans. The proposed project and project-related offsite improvements would be subject to the SCAQMD's AQMP.

The most current AQMP is the *2022 Air Quality Management Plan* (2022 AQMP), which was adopted on December 2, 2022 (SCAQMD 2022). The goal of the 2022 AQMP is to

[1] The most recent version of the AQMP (2016 AQMD) is based on the 2016-2040 RTP/SCS and will therefore rely on the 2016-2040 RTP/SCS when discussing plan consistency.

provide a regional roadmap to help the Air Basin achieve the USEPA's NAAQS 2015 8-hour ozone standard (70 parts per billion). The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

The 2022 AQMP incorporates the transportation strategy and transportation control measures from SCAG's Connect SoCal 2020 (2020-2045 *Regional Transportation Plan/Sustainable Communities Strategy* [2020-2045 RTP/SCS]) (SCAG 2020). SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP.

The 2022 AQMP forecasts future emissions inventories with growth based on SCAG's 2020-2045 RTP/SCS. According to the 2022 AQMP, the region is projected to see a 12 percent growth in population, 17 percent growth in housing units, 11 percent growth in employment, and an 8 percent growth in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, state and federal levels (SCAG 2020).

Noteworthy control strategies for mobile sources in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with the proposed project and project-related offsite improvements include strategies denoted in the 2022 AQMP as MOB-06, MOB-11, and MOB-15, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment (SCAG 2020). Descriptions of measures MOB-06, MOB-11, and MOB-15 are provided below:

- **MOB-06 – Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks additional emission reductions from existing heavy-duty vehicles with GVWR greater than 8,500 lbs through an accelerated vehicle replacement program with zero or low NO_X emission vehicles.

- **MOB-11 – Emission Reductions from Incentive Programs:** This control measure seeks to quantify and take credit for the emission reductions achieved through the implementation of SCAQMD administered incentive programs for SIP purposes. The South Coast AQMD has been implementing a variety of incentive programs including, but not limited to, Carl Moyer Memorial Air Quality Standards Attainment Program, Proposition 1B, Lower Emission School Bus, Community Air Protection Program, and Volkswagen Environmental Mitigation Trust. Examples of projects funded by these programs include heavy-duty vehicle/equipment replacements, installation of retrofit units, and engine repowers. These incentive programs result in substantial emission reductions that are typically not eligible for credit in plans to attain ozone standards because they are not required by regulation. However, actual emission reductions that are realized and quantified may qualify for credit.
- **MOB-15 – Zero Emission Infrastructure for Mobile Sources:** This control measure is intended to support and accelerate the deployment of zero emission infrastructure needed for the widespread adoption of zero emission vehicles and equipment. AB 2127 estimated that the State will need 157,000 electric vehicle charging stations for medium and heavy-duty vehicles by 2030. AB 8 assessed the fueling needs for hydrogen fuel cell vehicles and found that 1,700 hydrogen stations will be needed to support 1.8 million fuel cell electric vehicles (FCEVs) statewide by 2035. The proposed measure seeks to address these concerns and identify the unique challenges and opportunities for zero emission infrastructure development in the South Coast Air Basin, particularly as it relates to zero emission medium and heavy vehicle deployments.

The proposed project's and project-related offsite improvement's consistency with applicable air quality plans is provided below. There are no applicable numerical thresholds of significance for this consistency analysis. In accordance with the SCAQMD's CEQA Air Quality Handbook, the following criteria were used to evaluate the proposed project's and project-related offsite improvement's consistency with the SCAQMD's 2022 AQMP:

- Criterion 1: Will the project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Will the project exceed the assumptions utilized in preparing the AQMP?

The proposed project's and project-related offsite improvement's potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's 2022 AQMP.

Criterion 1

Consistent with the first criterion, the proposed project and project-related offsite improvements would not conflict with the ability of federal, State, and local agencies to implement fair-share emissions strategies or achieve compliance with criteria pollutant standards or other federal requirements. Specifically, the proposed project's and project-

related offsite improvement's volatile organic compound (VOC), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter (10 microns or smaller in diameter, PM10), and fine particulate matter (2.5 microns or smaller in diameter, PM2.5) emissions resulting from construction and operation were analyzed to ascertain any potential effects on regional and localized concentrations and determine the potential for such emissions to cause or contribute to a violation of the ambient air quality standards. As discussed under response to Section III (b) and response to Section III (c), the proposed project's and project-related offsite improvement's construction and operational emissions would not exceed the SCAQMD's regional mass emissions thresholds for VOC, NO_X, CO, SO2, PM10 or PM2.5 or the localized significance thresholds (LSTs) for NO_X, CO, PM10 or PM2.5, or generate roadway traffic congestion at an intersection that would result in a CO hotspot in excess of the ambient air quality standards as a result of project motor vehicle operations. The proposed project's and project-related offsite improvement's emissions would therefore not increase concentrations of criteria pollutants or their precursors in a manner that would conflict with or obstruct SCAQMD's efforts to achieve attainment of ambient air quality standards for any criteria pollutant for which it is currently not in attainment or jeopardize the current attainment status of the Basin for other criteria pollutants. Therefore, in response to Criterion 1, the proposed project and project-related offsite improvements would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new air quality violations, or delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2020–2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to these criteria.

Air Quality Management Plan Consistency

The proposed project and project-related offsite improvements would not obstruct implementation of the 2022 AQMP for, as discussed below, its construction and operational emissions would be less than significant. The proposed project and project-related offsite improvements would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (i.e., 13 California Code of Regulations, Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2022 AQMP. As discussed above, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render it consistent with, and meet or exceed, the AQMP requirements for control strategies

intended to reduce emissions from construction equipment and activities. Thus, the proposed project's and project-related offsite improvement's criteria pollutant emissions would not cause the Basin's criteria pollutant emissions to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and PM2.5),[2] or to cause the Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the proposed project and project-related offsite improvements are also consistent with the 2022 AQMP. The proposed project and project-related offsite improvements incorporates into its design appropriate control strategies set forth in the 2022 AQMP for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the plan is based.

Construction

Control Strategies

During its construction phase, the proposed project and project-related offsite improvements would ensure compliance with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations such as SCAQMD Rule 403 for controlling fugitive dust and SCAQMD Rule 1113 for controlling VOC emissions from architectural coatings. Compliance with these regulatory measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

Growth Projections

The proposed project and project-related offsite improvements would generate short-term construction jobs, but these jobs would not necessarily bring new construction workers or their families into the region, since construction workers are typically drawn from an existing regional pool who travel among construction sites within the region. Construction workers are not typically brought from other regions to work on developments such as the proposed project and project-related offsite improvements. Moreover, these jobs would be relatively small in number and temporary in nature. Therefore, the proposed project's and project-related offsite improvement's construction jobs would not conflict with the long-term employment or population projections upon which the 2022 AQMP is based.

[2] The Los Angeles County portion of the Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference refer to South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

Operations

Control Strategies and Policy Consistency

The 2022 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. As mentioned above, for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2020-2045 RTP/SCS regarding population, housing, and employment growth trends.

The project site is zoned Manufacturing, Heavy – with Site Plan and Design Review Overlay with a General Plan land use designation of Heavy Industrial. The approximate 200-megawatt BESS would consist of lithium-ion (or similar technology available at the time of construction) batteries on racks and stored in container or enclosures, inverters, MV transformers, switchgear, a collector substation, and gen-tie lines to transfer power released or captured by the proposed project to the SCE Hinson Substation. The project site is located within an industrial area with an oil refinery (Air Products) to the north, a coke (petroleum) storage facility to the south, the Dominquez Channel to the east, and Alameda Street to west. The proposed gen-tie line would be located approximately 500 feet north of the nearest residential use west of the SCE Hinson Substation.

Growth Projections

The proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, during operation of the proposed project and project-related offsite improvements, minimal amounts of emissions could be generated from periodic visits from service vehicles. Thus, a qualitative analysis is appropriate for assessing the proposed project's and project-related offsite improvement's mobile operational emissions.

The proposed project and project-related offsite improvements do not include residential or commercial development. The project site would not require daily staffing but rather require only periodic maintenance. No new employees would be required to operate the facilities. Implementation of the proposed project and project-related offsite improvements would not induce any additional growth within the service area, but rather would accommodate planned growth within the service area. As discussed in Section XVII, *Transportation*, this proposed project and project-related offsite improvements would not have a significant impact on transportation.

Projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality reductions identified in the AQMP. Based on the above, the proposed project and project-related offsite improvements would not conflict with growth projections in the 2022 AQMP and impacts would be less than significant.

b) As indicated above, the project site and project-related offsite improvements are located within the South Coast Air Basin. State and federal air quality standards are exceeded in many parts of the Basin for ozone (O_3) and PM2.5, including those monitoring stations nearest to the project site and project-related offsite improvements, and the Basin is designated a State and federal non-attainment area for these pollutants. The Basin is also designated as a State non-attainment area for PM10. The proposed project and project-related offsite improvements would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and operation. However, based on the following analysis, construction and operation of the proposed project and project-related offsite improvements would result in less-than-significant impacts relative to the daily significance thresholds for criteria air pollutant emissions established by the SCAQMD for construction and operational phases.

Daily regional construction and operational source project ozone precursor and criteria pollutant emissions such as VOC, NO_X, CO, SO_2, PM10, and PM2.5 were estimated using the most recent version of the California Emissions Estimator Model (CalEEMod) software, an emissions inventory software program recommended by SCAQMD. CalEEMod is based on outputs from the CARB OFFROAD model and the CARB on-road vehicle emissions factor (EMFAC) model, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, heavy-duty off-road equipment, and on-road vehicles. Activities parameters, such as number of pieces of equipment and equipment usage hours were provided by the Applicant.

Construction

Construction activities associated with the proposed project and project-related offsite improvements would generate temporary and short-term emissions of VOC, NO_X, CO, SO_2, PM10, and PM2.5. Construction related emissions are expected from site preparation, demolition, grading, trenching, installation of enclosures, substation and poles, paving, and decommissioning. During demolition approximately 150 cubic yards (cy) of concrete/asphalt debris would be generated. During the grading all existing crushed material from the existing business will be balanced throughout the site. No import or export of soil is anticipated. The proposed project's and project-related offsite improvement's construction is expected to commence in the third quarter 2024 and would last through first quarter 2026. If the proposed project's and project-related offsite improvement's construction commences later than the anticipated start date, air quality impacts would be less than those analyzed herein, because a more energy-efficient and cleaner burning construction equipment fleet mix would be expected in the future, pursuant to State regulations that require construction equipment fleet operators to phase-in less polluting heavy-duty equipment. Therefore, air quality impacts would generally be less than those analyzed herein due to the likelihood of less emissions generated in a day.

The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated construction equipment

was estimated based on consultation with the Applicant. A detailed summary of construction equipment assumptions by phase is provided in the modeling files in **Appendix A** of this IS/MND.

Construction of the proposed project and project-related offsite improvements is estimated to last approximately 18 months. Construction duration by phase is provided in **Table 2, Estimated Construction Schedule**.

TABLE 2
ESTIMATED CONSTRUCTION SCHEDULE

Activity	Start Date	End Date	Duration (Work Days)
SCE Upgrades/Interconnection			
Civil Construction	8/1/2024	10/1/2024	53
Electrical Construction/Testing	10/2/2024	12/24/2024	72
Electrical Construction	12/25/2024	1/5/2025	10
Electrical Construction	1/15/2025	2/1/2025	16
FO Cable Construction	2/2/2025	2/7/2025	5
FO Cable Civil Construction	2/8/2025	2/19/2025	10
BESS			
Site Preparation	3/1/2025	3/15/2025	13
Collector Substation Site Preparation	3/1/2025	3/15/2025	13
BESS Grading	3/1/2025	4/30/2025	52
Collector Substation Grading	3/1/2025	4/1/2025	27
Battery/Container Installation & Collector Substation	4/1/2025	11/30/2025	209
Construction/Installation	8/1/2025	10/31/2025	79
Gen-tie Trenching	8/1/2025	10/31/2025	79
Gen-Tie Duct Bank and Vault Installation	11/1/2025	11/30/2025	25
Gen-Tie Jack-and-Bore	12/1/2025	2/28/2026	78
Gen-Tie Road Resurface and Clean Up	3/1/2026	3/30/2026	25

SOURCE: City of Carson 2023, in consultation with the Applicant

The maximum daily regional emissions from these activities are estimated by construction phase and compared to the SCAQMD significance thresholds. Maximum daily emissions are calculated by taking the sum of the overlapping phases for each criteria pollutant. As shown in **Table 3, Maximum Regional Construction Emissions – Without Mitigation (Pounds per Day)**, emissions resulting from the proposed project and project-related offsite improvements construction would not exceed any criteria pollutant thresholds established by the SCAQMD (SCAQMD 2015). Therefore, impacts would be considered less than significant, and no mitigation is required.

TABLE 3
MAXIMUM REGIONAL CONSTRUCTION EMISSIONS – WITHOUT MITIGATION (POUNDS PER DAY)

	Emissions (pounds per day)					
Year	**VOC**	**NO_X**	**CO**	**SO_X**	**PM10**	**PM2.5**
Construction Phases - SCE Upgrades/Interconnection						
Civil Construction (2024)	<1	3.7	5.9	<1	<1	<1
Electrical Construction 1 (2024)	<1	2.7	9.3	<1	<1	<1
Electrical Construction 2 (2024)	<1	4.8	15.2	<1	<1	<1
Electrical Construction 2 (2025)	<1	4.8	15.2	<1	<1	<1
Electrical Construction 3 (2025)	<1	3.1	11.1	<1	<1	<1
FO Cable Construction 1 (2025)	<1	<1	1.0	<1	<1	<1
FO Cable Construction 2 (2025)	<1	1.8	4.9	<1	<1	<1
Maximum Daily Regional Emissions	**<1**	**4.8**	**15.2**	**<1**	**<1**	**<1**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Construction Phases - BESS						
Site Preparation (2025)	<1	4.2	24.9	<1	1.2	<1
Collector Substation Site Preparation (2025)	<1	1.8	18.7	<1	13.4	6.9
BESS Grading (2025)	<1	6.1	29.1	<1	20.	<1
Collector Substation Grading (2025)	<1	3.2	21.8	<1	13.6	6.9
Collector and Battery Installation (2025)	1.8	17.0	65.6	<1	2.0	<1
Gen-Tie Duct Bank and Vault Installation (2025)	<1	7.3	24.1	<1	<1	<1
Gen-Tie Jack-and-Bore (2025)	<1	3.0	11.9	<1	<1	<1
Decommissioning (2026)	<1	7.7	34.0	<1	1.2	<1
Gen-Tie Road Resurface and Clean Up (2025)	<1	2.4	8.2	<1	<1	<1
Gen-Tie Road Resurface and Clean Up (2026)	<1	2.4	8.1	<1	<1	<1
Gen-Tie Trenching (2025)	<1	10.7	15.7	<1	1.6	<1
Overlapping Phases - BESS						
Site Preparation & Collector Substation Site Preparation & BESS Grading & Collector Substation Grading	2.1	15.2	94.5	<1	30.2	14.4
Collector and Battery Installation & Gen-Tie Trenching & Gen-Tie Duct Bank Vault Installation	3.2	34.9	105.4	<1	4.4	1.5
Collector and Battery Installation & Gen-Tie Jack-and-Bore	2.1	20.0	77.4	<1	2.4	<1
Maximum Daily Regional Emissions	**3.2**	**34.9**	**105.4**	**<1**	**30.2**	**14.4**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

NOTE:
Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.
SOURCE: ESA 2022

Operation

The proposed project is a battery energy storage facility which will consists of transformer, a switchgear, a collector substation, containers or enclosures that will house lithium-ion (or similar technology available at the time of construction) batteries, an emergency generator, and a gen-tie line to transfer power released or captured to the SCE Hinson Substation. The proposed project would include a 110 kilowatt (kW) natural gas emergency generator. As previously stated, during operations, the proposed project and project-related offsite improvements would be unoccupied and monitored remotely and no new employees were assumed. Therefore, minimal emissions from mobile emissions were assumed for periodic inspections, monitoring, maintenance, and testing purposes. Energy usage would come in the form of electricity and natural gas for container/enclosure heating, ventilation, and air conditioning (HVAC) systems, security lighting, and area sources such as landscaping equipment. The electricity required to power the air conditioning units would be obtained internally and each individual enclosure would be directly connected to the energy storage system's discharge and would not require additional electrical input. However, this analysis conservatively assumes the proposed project and project-related offsite improvements would be connected to the local utility provider. The proposed project and project-related offsite improvements can expect most of the energy usage to come from lighting and the HVAC system required to provide air conditioning of the building. Operational emissions modeling conservatively assumes the emergency generator would run a maximum of 50 hours annually for emergencies and for a maximum of 2 hours during a day when maintenance occurs. The proposed project would also include landscaping equipment such as lawnmower and trimmers to maintain the approximately 14,092 square feet of landscaping proposed along the entrance to the project site.

Operational emissions for the proposed project and project-related offsite improvements were estimated using CalEEMod for the land uses that would be developed under the proposed project and project-related offsite improvements (2026 project buildout) (refer to **Appendix A** of this IS/MND for compiled detailed assumptions, calculations, and modeling outputs). The CalEEMod tool uses landscaping equipment greenhouse gas (GHG) emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (CARB 2003). The CalEEMod software estimates that landscaping equipment operate for 250 days per year in the Basin. Emissions of VOCs from the use of consumer products and architectural coatings are based on SCAQMD-specific emission factors for land uses in the Basin.

Operational-source emissions are summarized in **Table 4, Estimated Maximum Unmitigated Regional Operational Emissions (Pounds per Day)**. As shown, project operational-source emissions are below the applicable SCAQMD regional thresholds of significance (SCAQMD 2015). Therefore, impacts would be considered less than significant, and no mitigation is required.

TABLE 4
ESTIMATED MAXIMUM REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY)[a]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Proposed Project and project-related offsite improvements						
Area (Consumer Projects, Landscaping)	9.4	0.1	13.2	<0.005	0.0	0.0
Energy (Natural Gas)	0.1	2.1	1.7	0.0	0.2	0.2
Stationary (Emergency Generator)	0.1	1.2	1.1	0.0	0.1	0.1
Total Project and project-related offsite improvements	**9.6**	**3.4**	**16.1**	**0.0**	**0.2**	**0.2**
SCAQMD Numeric Indicators	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

SOURCE: ESA 2023

The SCAQMD's approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the SCAQMD has developed a comprehensive plan, the 2022 AQMP, which addresses the region's cumulative air quality condition.

c) According to the SCAQMD CEQA Air Quality Handbook, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The localized effects from the on-site portion of the emissions were evaluated at nearby sensitive receptor locations potentially impacted by the proposed project and project-related offsite improvements according to the SCAQMD's Localized Significance Threshold Methodology (June 2003, revised July 2008), which relies on on-site mass emission rate screening tables and project-specific dispersion modeling, which may be used for sites greater than 5 acres or for projects that exceed the screening tables, as appropriate (SCAQMD 2008). LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of a NAAQS or CAAQS.

The LSTs are applicable to NO_X, CO, PM10, and PM2.5. For NO_X and CO, the thresholds are based on the ambient air quality standards. For PM10 and PM2.5, the thresholds are based on requirements in SCAQMD Rule 403 (Fugitive Dust) for construction and Rule 1303 (New Source Review Requirements) for operations. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the LSTs and, therefore, not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between

the project area and the nearest sensitive receptor (e.g., residences, schools, hospitals). For the proposed project and project-related offsite improvements, the appropriate Source Receptor Area (SRA) for the LSTs is the South Los Angeles County Coastal monitoring station (SRA 4). The nearest sensitive receptors to the proposed project are the residential uses located 350 feet to the east of the gen-tie route, 500 feet to the north of the SCE Hinson Substation connection point, and approximately 2,500 feet to the east of the BESS portion of the project site. The total acreage disturbed in any one day is estimated to be 5 acres. The LST analysis were based on the SCAQMD's look-up tables for a 5-acre site in SRA 4 with sensitive receptors located 100 meters (350 feet) from the project site (June 2003, revised July 2008).

The localized effects from the on-site portion of the proposed project's and project-related offsite improvement's daily emissions were evaluated at the sensitive receptor locations that would be potentially impacted by the proposed project and project-related offsite improvements according to the SCAQMD's LST methodology. SCAQMD's Methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered, plus the truck idling emissions (e.g., haul trucks and vendor trucks) that were calculated separately using the EMFAC emission factors for heavy-heavy-duty (HHD) vehicles. Daily localized emissions caused by the proposed project and project-related offsite improvements were compared to the LSTs in the SCAQMD's look-up tables to determine whether the emissions would cause violations of ambient air quality standards.

Construction Emissions

Localized Construction Emissions

Table 5, Maximum Daily Localized Construction Emissions, presents the localized emissions from on-site equipment during the construction of the proposed project and project-related offsite improvements, located 100 meters (350 feet) west of the project site, in the vicinity of the project area without mitigation.

Based on the results summarized in Table 5, the unmitigated proposed project and project-related offsite improvements impacts would not exceed the LSTs.

Operational Emissions

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources. With regard to on-site sources of emissions, the proposed project and project-related offsite improvements would generate emissions from area sources located on-site such as natural gas combustion from landscaping equipment, and use of consumer products. **Table 6, Maximum Daily Localized Operational Emissions**, presents the localized emissions from on-site equipment during the operation of the proposed project and project-related offsite improvements.

TABLE 5
MAXIMUM DAILY LOCALIZED CONSTRUCTION EMISSIONS[a]

Year	Emissions (pounds per day)			
	NO_x	CO	PM10	PM2.5
SCE Upgrades/Interconnection[b] - Construction Phases				
Civil Construction (2024)	3.3	4.8	<1	<1
Electrical Construction 1 (2024)	2.1	8.0	<1	<1
Electrical Construction 2 (2024)	4.5	14.1	<1	<1
Electrical Construction 2 (2025)	4.5	14.4	<1	<1
Electrical Construction 3 (2025)	2.8	8.9	<1	<1
FO Cable Construction 1 (2025)	<1	<1	<1	<1
FO Cable Construction 2 (2025)	1.6	4.1	<1	<1
Project Maximum Daily Emissions	**4.5**	**14.4**	**<1**	**<1**
SCAQMD LST Significance Thresholds	*756*	*2,613*	*58*	*18*
Exceeds Thresholds	*No*	*No*	*No*	*No*
BESS[b] – Construction Phase				
Site Preparation (2025)	3.9	22.2	<1	<1
Collector Substation Site Preparation (2025)	1.6	17.5	13.2	6.8
BESS Grading (2025)	5.7	24.9	1.2	<1
Collector Substation Grading (2025)	3.0	19.5	13.2	6.8
Collector and Battery Installation (2025)	15.9	57.0	<1	<1
Gen-Tie Duct Bank and Vault Installation (2025)	6.8	20.4	<1	<1
Gen-Tie Jack-and-Bore (2025)	2.8	10.2	<1	<1
Decommissioning (2026)	4.9	30.8	<1	<1
Gen-Tie Road Resurface and Clean Up (2025)	2.2	7.0	<1	<1
Gen-Tie Road Resurface and Clean Up (2026)	2.2	7.0	<1	<1
Gen-Tie Trenching (2025)	6.0	11.2	<1	<1
Overlapping Phases - BESS[b]				
Site Preparation & Collector Substation Site Preparation & BESS Grading & Collector Substation Grading	14.2	84.4	28.1	13.1
Collector and Battery Installation & Gen-Tie Trenching & Gen-Tie Duct Bank Vault Installation	28.7	88.6	<1	<1
Collector and Battery Installation & Gen-Tie Jack-and-Bore	18.7	67.2	<1	<1
Project Maximum Daily Emissions	***28.7***	***88.6***	***28.1***	***13.9***
SCAQMD LST Significance Thresholds	*756*	*2,613*	*58*	*18*
Exceeds Thresholds	*No*	*No*	*No*	*No*

NOTE:

a. Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.

b. Construction associated with the SCE is located approximately 350 feet from the nearest sensitive receptors. Construction associated with the BESS is located approximately 2,500 feet from the nearest sensitive receptors. The localized analysis conservatively assumes all construction is located within 350 feet from the nearest sensitive receptors.

SOURCE: ESA 2023

TABLE 6
MAXIMUM DAILY LOCALIZED OPERATIONAL EMISSIONS[a]

Operational Activity	NO_x	CO	PM10	PM2.5
Area (Consumer Products, Landscaping)	0.1	13.2	0.0	0.0
Energy (Natural Gas)	2.1	1.7	0.2	0.2
Stationary Equipment (Emergency Generator)	1.2	1.1	0.1	0.1
Project Maximum Daily Emissions	**2.2**	**14.9**	**0.2**	**0.2**
SCAQMD LST Significance Thresholds	*126*	*2,613*	*14*	*5*
Exceeds Thresholds	*No*	*No*	*No*	*No*

NOTE:

a. Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.

b. Operations Construction associated with the proposed project would occur at the project site and project-related offsite improvements and are located approximately 2,500 feet from the nearest sensitive receptors. The localized analysis conservatively assumes operations would be within 350 feet from the nearest sensitive receptors.

SOURCE: ESA 2023

CO "Hot Spot" Analysis

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. While construction-related traffic on the local roadways would occur during construction, the net increase of construction worker vehicle trips to the existing daily traffic volumes on the local roadways would be relatively small and would not result in CO hotspots. Additionally, the construction-related vehicle trips would be short-term, and cease once construction activities are completed. As previously mentioned, the proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, the proposed project and project-related offsite improvements would not cause or contribute to the formation of CO hotspots based on the AQMP's 2003 study, which estimates 100,000 vehicles per day could cause the formation of a CO hotspot (SCAQMD 2003a). Therefore, impacts would be less than significant.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Intermittent construction activities associated with the proposed project and project-related offsite improvements would result in short-term emissions of diesel particulate matter, which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit diesel particulate matter (DPM) during general construction activities, such as excavation, materials transport and handling, and building construction. During operational activities DPM would be emitted by the diesel

trucks traveling to, on, and from the project site for equipment inspections, monitoring and testing. However, the number of trips would be minimal. In addition, the proposed project would include an emergency generator which would be fueled with natural gas, which is not a major TAC source.

Diesel particulate matter poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance), which was updated in 2015 with new exposure parameters including age sensitivity factors (OEHHA 2015). Sensitive receptors include residential uses located approximately 350 feet east of the project site.

Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA and the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, (SCAQMD 2003b) health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 18 months), the proposed project and project-related offsite improvements would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities.

The proposed project and project-related offsite improvements would be consistent with the applicable 2022 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The proposed project and project-related offsite improvements would comply with regulatory control measures including the CARB Air Toxics Control Measure (ATCM) that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models; compliance with these would minimize emissions of TACs during construction. SCAQMD recommends that construction health risk assessments be conducted for substantial sources of DPM emissions (e.g., earth-moving construction activities) in proximity to sensitive receptors and has provided guidance for analyzing mobile source diesel emissions. Although sensitive receptors, including residential uses, are located to the east of the project site, localized DPM emissions (strongly correlated with PM2.5 emissions) are less than significant (as shown in Table 5, above). Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM2.5 emissions coupled with the relatively short-term duration of construction activity anticipated at 18 months resulted in an overall low level of DPM concentrations in the project site and project-related offsite improvements. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project site and project-related

offsite improvements. Thus, although there are sensitive receptors located within proximity to the project site and project-related offsite improvements, compliance with regulatory control measures and the limited duration of construction activities would minimize exposures.

Operations

SCAQMD recommends that health risk assessments be conducted for substantial sources of operational DPM emissions (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions (SCAQMD 2003b). During operational activities DPM would be emitted by the diesel trucks traveling to, on, and from the site for periodic equipment inspections, monitoring and testing. However, the land uses that would be developed under the proposed project and project-related offsite improvements are not considered a substantial source of operational DPM, as described by the SCAQMD. Therefore, the proposed project and project-related offsite improvements operations associated with the 200-megawatt BESS would generate only minor amounts of diesel emissions from mobile sources, such as delivery/box trucks and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, proposed project and project-related offsite improvements trucks would be required to comply with the applicable provisions of the CARB 13 California Code of Regulations, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and NO_X emissions from existing diesel trucks. Therefore, proposed project and project-related offsite improvements operations would not be considered a substantial source of diesel particulates. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes and automotive repair facilities. The proposed project and project-related offsite improvements would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). Project operations would only result in minimal emissions of toxic air contaminants from the use of architectural coatings and other products. The proposed project's and project-related offsite improvement's land uses would not include installation of industrial-sized equipment (i.e., paint booths) or require extensive use of commercial or household cleaning products. In addition, as previously stated, the emergency generator would not be fueled with a TAC source such as diesel fuel. Based on this, the proposed project and project-related offsite improvements are not expected to release substantial amounts of TACs.

Therefore, based on the limited activity of TAC sources and TAC concentrations at off-site sensitive receptors relative to existing conditions, the proposed project and project-related offsite improvements would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant.

d) Potential sources that may emit odors during construction activities include construction equipment exhaust and the use of architectural coatings and solvents. According to the

SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. Further, construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction. Through adherence with mandatory compliance with SCAQMD Rules, no construction activities or materials would create objectionable odors. The nearest sensitive receptors are single-family residences located approximately 350 feet to the east of the project site. The proposed uses of the proposed project and project-related offsite improvements would not typically generate nuisance odors at nearby sensitive receptors.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project and project-related offsite improvements do not include any of the land uses associated with odor complaints.

Furthermore, as discussed in Thresholds b and c, above, construction and operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO_2).

Therefore, impacts related to other emissions, including those that would lead to odors adversely affecting a substantial number of people, would be less than significant.

IV. Biological Resources

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
BIOLOGICAL RESOURCES— Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

This section is based on the Avocet Energy Storage Project Biological Constraints Analysis Memorandum, prepared by Dudek, dated December 9, 2022 (refer to **Appendix B** of this IS/MND) and a Biological Resources Technical Memorandum, prepared by ESA, dated November 14, 2023 (refer to **Appendix C** of this IS/MND).

Discussion

a) The project site is currently developed as an aggregate recycling center within a highly industrialized area. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. As stated in the Biological Constraints Analysis Memorandum (Dudek 2022) and Biological Resources Technical Memorandum (ESA 2023), database reviews showed that the project site and project-related offsite improvements are not overlain within U.S. Fish and Wildlife Service (USFWS)-designated Critical Habitat for any special-status plant or wildlife species (USFWS 2023). Additionally, the California Natural Diversity Data Base (CNDDB) and California Native Plant Society (CNPS) Rare Plant Inventory identified 92 special-status species being recorded within the Long Beach USGS 7.5-minute quadrangle and seven surrounding quadrangles including Inglewood, Los Alamitos, San Pedro, Seal Beach, South Gate, Torrance, and Whittier (CDFW 2022; CDFW 2023a; CNPS 2022; CNPS 2023). While special-status species could occur in the general area, the entirety of the project site and project-related offsite improvements

consists of developed land and partial open space that does not provide suitable habitat for special-status plant or wildlife species.

Generally, limited suitable avian nesting habitat is present within the project site and along the proposed gen-tie route due to the dominance of developed and disturbed areas. However, many avian species are known to nest and forage within ornamental shrubs and trees planted as part of existing landscaping and man-made structures and buildings. The existing landscaping and man-made structures provide suitable nesting habitat for several common and migratory bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3513. Therefore, construction of the proposed project and project-related offsite improvements may affect nesting birds, as a very limited amount of suitable habitat occurs for common and migratory bird species within the project site and project-related offsite improvements. Mitigation Measures would be required prior to or during construction. Implementation of Mitigation Measure BIO-1 would reduce this potentially significant impact to nesting birds during construction to less than significant.

Mitigation Measure BIO-1: Nesting Birds/Raptors. If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.

b) The project site, project-related offsite improvements, and surrounding area are located partially within an urbanized setting and partially within an open space area. No wetlands or drainages are present within the project site or project-related offsite improvements. The proposed gen-tie route crosses over the Dominguez Channel, a riverine feature classified as R1UBVx, which is categorized as a permanently flooded, tidally influenced riverine deepwater habitat. The Dominguez Channel supports aquatic habitat that is regulated by the California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and United States Army Corps of Engineers (USACE). No direct impacts are planned to occur within the Dominguez Channel resulting from proposed project and project-related offsite improvements activities since installation of poles for the gen-tie line would occur outside of the channel. Additionally, no sensitive natural communities occur within the project site or project-related offsite improvements. While no direct impacts to riparian or sensitive natural communities are proposed, construction would occur adjacent to the Dominguez Channel which has the potential to result in runoff into the channel. Additionally, installation of the gen-tie line over the Dominguez Channel requires Section 10 of the Rivers and Harbors Act (RHA)

(33 U.S.C. § 403) authorization from the USACE for work or structures in or affecting navigable waters of the U.S. (USACE 1981). Therefore, implementation of Mitigation Measure BIO-2 would reduce potential indirect impacts to the Dominguez Channel during construction to less than significant.

Mitigation Measure BIO-2: Aquatic Resources. The following are recommended to reduce aquatic resource impacts as a result of project activities:

- Prior to installation of the overhead transmission line over Navigable Waters (Dominguez Channel), consultation with USACE is recommended to determine whether a Section 10 permit will be necessary.
- Erosion control measures (i.e. silt fencing, straw wattles, etc.) should be implemented adjacent to the Dominguez Channel when work is occurring adjacent to the Dominguez Channel to prevent sediment/contaminants from continuing offsite into the channel.
- Re-fueling of equipment should be conducted at least 50 feet from the Dominguez Channel.
- Drip pans should be placed underneath all mechanical machinery that will be staged adjacent to the Dominguez Channel.

c) No wetland features are identified by the National Wetlands Inventory (NWI) as occurring within or surrounding the project site and project-related offsite improvements (USFWS 2023). Additionally, no wetland features were identified during the site visits. Therefore, no impacts to wetlands would occur resulting from project activities.

d) The project site and project-related offsite improvements are located partially within a highly urbanized and partially within an open space area. No conservation lands or wildlife corridors are identified as occurring nearby. Therefore, no impact would occur to wildlife movement as a result of the proposed project, project-related offsite improvements, or associated construction. No known or expected native wildlife nursery sites occur within the vicinity of the project site or project-related offsite improvements, and no such resources would be affected by the proposed project, project-related offsite improvements, or associated construction. Therefore, no impact that would impede the use of native wildlife nursery sites would occur.

The MBTA is the domestic law that affirms, or implements, a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. Under California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800, a project operator is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds protected by the MBTA; or the taking of any nongame bird. In addition, the proposed project and project-related offsite improvements

would comply with the MBTA and the California Fish and Game Code for the protection of avian nests and their young by implementing Mitigation Measure BIO-1.

e) The cities of Carson and Long Beach have ordinances requiring a permit for tree or shrub removal within public parks, grounds, streets, and other public areas. In addition, oak trees (*Quercus* sp.) are protected under the County of Los Angeles Oak Tree Ordinance, Section 22.56.2050 – 22.56.2260 of the Los Angeles County Municipal Code. No protected oak trees occur within the study area and no trees are planned for removal resulting from project activities. Therefore, no impacts related to conflicts with any local policies any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would occur from project activities.

f) The project site and project-related offsite improvements are located partially within an urbanized area of the City of Carson and City of Los Angeles and partially within an open space area within the City of Long Beach. The project site and project-related offsite improvements are not located within an area designated within a habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan (CDFW 2023b). Therefore, the proposed project, project-related offsite improvements, and associated construction would not conflict with provisions of an adopted natural community conservation plan or other approved local, regional, or state habitat conservation plan and no impact would occur.

V. Cultural Resources

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
CULTURAL RESOURCES— Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

This section is based on the Cultural Resources Assessment Report, located in **Appendix D** of this IS. The scope of work for the cultural resources assessment included a cultural resources records search through the South Central Coastal Information Center (SCCIC), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), a pedestrian survey of the project site, land use history research, a subsurface archaeological testing program (i.e., Extended Phase I Assessment), and other archival research. ESA also conducted a pedestrian survey and analysis for potential impacts to historic built environment resources.

Discussion

a) **Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

Less than Significant Impact. Results of the SCCIC record search indicated that nine cultural resources have been previously recorded within a 0.50-mile radius of the project site. These include one protohistoric archaeological site/Native American burial site (CA-LAN-2682); three historic period archaeological sites (CA-LAN-2942H, -3063H, and -3064H); one California Registered Historical Landmark (P-19-187085); and four historic architectural resources (P-19-180783 Pacific Electric Watson Station was located 0.30 miles southwest of the project site, P-186868 (Kinder Morgan Tank Storage Terminals located 0.25 miles south of the project site, and P-190986, and P-192309, transmission towers located 120 ft east of the proposed gen-tie line). None of these resources have been recorded within the project site; however, four of them (two archaeological and two architectural) (CA-LAN-2682, P-19-187085, -190986, and -192309) have been recorded within close proximity to the project site.

Survey and Impacts Analysis Results

The proposed project would connect the BESS site to the SCE Hinson Substation via a transmission line and conduct required upgrades to the SCE Hinson Substation.

No historic resources were identified within the project site including the SCE Hinson Substation and the associated resource, a transmission line supported by seventeen wood poles of which six are historic dating to 1962 and one dating to 1971, located to the west of the SCE Hinson Substation enclosure. The SCE Hinson Substation was deemed ineligible for listing on the

National and California Register (SCE, 2024) and the associated transmission line doesn't appear to be significant to the historic era electrical management infrastructure of the Southern California Edison Company. Hence, the transmission line and the supporting wood poles are not eligible as significant historic resources. Therefore, the proposed project that would connect the BESS site to the SCE Hinson Substation via a transmission line and conduct required upgrades to the SCE Hinson Substation would not result in any direct impacts.

As stated earlier, and elaborated in the technical report, research identified two adjacent historic architectural resources (P-19-192309) and (P-19-190986) located within 0.50-mile radius of the proposed gen-tie line route and one adjacent historic architectural resource (P-19-186868) located within 0.50-mile radius of the project site. P-19-192309, the Long Beach-Laguna Bell 60kv and 220kV Transmission lines and P-19-190986, the SCE Santa Fe Tower 2/Hinson Harbor Gen M3-T2 Transmission lines are located approximately 120 feet east of the proposed gen-tie line route. Both are transmission lines constructed in approximately 1927 (P-19-190986) and approximately 1927-1928 (P-19-1902309), several decades before the construction of the SCE Hinson Substation. The construction of the proposed gen-tie line connecting the BESS to the SCE Hinson Substation would not materially or visually impair the integrity and the historic significance of the Long Beach-Laguna Bell 60kv and 220kV Transmission lines (P-19-192309) or SCE Santa Fe Tower 2/Hinson Harbor Gen M3-T2 transmission lines (P-19-190986). The areas around these resources are already developed with several transmission towers and lines and a complete transmission substation to the north. The addition of the proposed gen-tie line would not substantially change the character of the setting or cause any adverse visual or physical impacts to historical resources.

The historic architectural resource, P-19-186868, adjacent to the project site is the Kinder Morgan Tank Storage Terminals LLC, a 100-acre storage tank facility site for oil products constructed in the 1920s. It is located 0.25 miles to the south of the project site. The project site will be developed as an energy storage facility with storage enclosures, a collector substation, invertors, transformers, and telecommunication facilities. The historic resource, a storage tank facility, is developed within an industrial setting with several similar storage facilities, electrical transmission lines, and rail yard. Moreover, there is no direct view of P-19-186868, from the project site, due to industrial development and foliage. Therefore, the proposed project would have a less than significant impact on the architectural resource.

b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Less than Significant Impact with Mitigation Incorporated. The SLF search yielded negative results and the SCCIC results indicated that no previously recorded archaeological resources were located within the project site. No archaeological resources were identified as a result of the pedestrian survey, but ground surface visibility was poor in a majority of the areas within the project site that likely obstructed the identification of surficial archaeological resources. According to records obtained from the SCCIC, resource CA-LAN-2682 (Native American burial site) was discovered in the vicinity of the project site during utility improvements in 1998 and is described as consisting of shell midden soils and over 500 shell beads, projectile points, bone

awls, glass trade beads, steatite pipe fragments and other steatite objects, as well as multiple human burials.

ESA implemented an archaeological test excavation program to determine whether resource CA-LAN-2682 extended onto the project site by excavating seven mechanical trenches and 16 Shovel Test Pits or Hand Auger Bores in the western portion of the project site. One possible fused shale flake artifact and several unmodified marine and estuarine shellfish specimens were recovered from many excavation units from the test excavation effort. However, these materials were found in heavily disturbed contexts intermixed with modern refuse items (e.g., red brick fragments, bottle glass fragments, concrete chunks, and rusted nails). These materials were found in contexts that had been redeposited as fill for the project site; therefore, it is not possible to definitively classify them as prehistoric artifacts or ecofacts that may be associated with resource CA-LAN-2682 or another prehistoric archaeological resource. Therefore, no archaeological resources were recovered during the test excavation effort.

Despite the negative results of the pedestrian survey and subsurface test excavations, the proposed project and project-related offsite improvements have a moderate potential to encounter buried prehistoric archaeological resources, including human remains, during construction given the identification of CA-LAN-2682 and the Native American village of *Suangna* in the vicinity of the project site, the presence of Holocene-age alluvium that underlies the project site that has been deposited within the past 11,700 years, the project site's location in close proximity to water sources, and since the project site retains a low degree of slope. Based on these findings, Mitigation Measures CUL-1 through CUL-3 are prescribed below. With implementation of these mitigation measures, impacts to archaeological resources would be less than significant under CEQA.

Mitigation Measure CUL-1: Prior to the issuance of a demolition permit, the Applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during initial project construction work such as demolition, clearing/grubbing, grading, trenching, or related moving of soils (collectively, ground disturbing activities) within the project site and project-related offsite improvements ; provided, however, that ground disturbing activities shall not include any moving of soils after they have been initially disturbed or displaced by project-related construction. The Qualified Archaeologist shall determine the frequency of monitoring based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. The frequency of monitoring can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist.

Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.

Mitigation Measure CUL-2: In the event that historic or prehistoric archaeological resources (e.g., bottles, foundations, refuse dumps, shell midden, lithic/stone tool materials, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. After consulting with the Applicant, the Qualified Archeologist shall establish an appropriate buffer in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the ground where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.

All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines the find to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Applicant and the City of Carson (City) to develop a reasonable and feasible treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the resources, they may be donated to a local school or historical society in the area (such as a local historical society or school) for educational purposes.

Mitigation Measure CUL-3: The Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and project-related offsite improvements and required mitigation measures.

c) **Disturb any human remains, including those interred outside of dedicated cemeteries?**

Less than Significant Impact with Mitigation Incorporated. As discussed above, although the pedestrian survey and subsurface test excavations did not identify human remains, the proposed project and project-related offsite improvements has a moderate potential to encounter buried prehistoric archaeological resources, including human remains, during construction given the reasons provided above. If human remains are encountered during construction, disturbance of those remains could result in a potentially significant impact. With implementation of Mitigation Measure CUL-4, which requires following state laws in the event of a human remains discovery, impacts to human remains would be less than significant.

Mitigation Measure CUL-4: If human remains are encountered unexpectedly during implementation of the proposed project and project-related offsite improvements, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County

Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the landowner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.

Mitigation Measures TCR-1, TCR-2, and TCR-3 shall also be implemented and shall apply to address the potential discovery of tribal cultural resources during construction.

VI. Energy

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
ENERGY— Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Discussion

a) The proposed project and project-related offsite improvements would consume energy during construction activities primarily from on- and off-road vehicle fuel consumption in the form of diesel and gasoline and electricity from water conveyance for dust control. Project operation would consume energy from energy use from enclosure HVAC systems and lighting, and from mobile sources. The analysis below includes the proposed project's energy requirements and energy use efficiencies by energy type for each stage of the proposed project and project-related offsite improvements (construction and operations).

Construction

Construction of the proposed project and project-related offsite improvements would result in energy demand primarily from off-road equipment and on-road vehicle fuel consumption (diesel and gasoline) and secondarily from electricity for conveying water used for dust suppression and for a temporary on-site construction office/trailer. The analysis below includes the proposed project's energy requirements and energy use efficiencies by energy type for each stage of the proposed project and project-related offsite improvements.

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors from the California Air Resources Board (CARB) OFFROAD model, which was used in the proposed project's air quality analysis. On-road vehicles would include trucks to haul material to and from the project site and project-related offsite improvements, vendor trucks to deliver supplies necessary for project construction, water trucks for dust control, and fuel used for employee commute trips. The estimated fuel usage for on-road vehicles is based on the number of trucks and employee commute trips that would occur during construction activities and per mile fuel consumption factors from the CARB on-road vehicle emissions factor (EMFAC) model, which was used in the proposed project's air quality analysis. Electricity used for a portable construction office was calculated using energy intensity factors from CalEEMod and electricity from water conveyance for dust control was calculated using assumptions for gallons used per acre per day and

CalEEMod water conveyance intensity factors applied to calculate total construction electricity consumption. Construction activities typically do not involve the consumption of natural gas. **Table 7**, **Summary of Energy Consumption During Project Construction**, summarizes the total and annual fuel and electricity consumption from construction activities for the proposed project and project-related offsite improvements.

TABLE 7
SUMMARY OF ENERGY CONSUMPTION DURING PROJECT CONSTRUCTION

Fuel Type	Quantity
Gasoline	**gallons**
On-Road Construction (Workers)	29,740
Total Gasoline (13 months)	
Diesel	**gallons**
On-Road Construction Equipment	22,817
Off-Road Construction Equipment	148,163
Total Diesel (13 months)	***170,980***
Electricity	**MWh**
Construction Trailer & Water Conveyance for Dust Control	27
Total Electricity (13 months)	29
Annualized Gasoline Use (gal)	**17,459**
Annualized Diesel Use (gal)	**100,576**
Annualized Electricity (MWh)	**27**

NOTES:
gal = gallons; MWh = megawatt-hours
SOURCE: ESA 2023

As shown in Table 7, annual average construction electricity usage would be approximately 27 megawatt-hours (MWh). This amount is within the supply and infrastructure capabilities of Southern California Edison (SCE), the electricity provider for the project site and project-related offsite improvements, which had a net energy load of 84,218 gigawatt-hours (GWh) in 2022 (SCE 2022).[3] The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the proposed project's and project-related offsite improvement's annual operational electricity. Construction electricity usage of the proposed project and project-related offsite improvements would consume approximately 0.00000003 percent of SCE's total load and would not cause additional strain on SCE's electricity load. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related air pollutant and GHG emissions from more traditional construction-

[3] The most recent year that SCE data was available.

related energy in the form of diesel fuel. Therefore, impacts from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Operations

During operation of the proposed project and project-related offsite improvements, energy would be consumed for, including, but not limited to HVAC equipment, security lighting, and the use of electronics used for remote monitoring. The electricity required to power the proposed project and project-related offsite improvements would be obtained internally and each individual enclosure would be directly connected to the energy storage system's discharge and would not require additional electrical input. However, this analysis conservatively assumes the proposed project and project-related offsite improvements would be connected to the local utility provider. Since the proposed project and project-related offsite improvements would be unoccupied and monitored remotely and no new employees were assumed, minimal emissions from mobile emissions were assumed for periodic inspections, monitoring, maintenance, and testing purposes. Therefore, no energy consumption during project operations related to vehicle trips were assumed. **Table 8, Project Operational Energy Usage**, summarizes the operational energy consumption of the proposed project and project-related offsite improvements.

TABLE 8
PROJECT OPERATIONAL ENERGY USAGE

Energy Type[a]	Annual Quantity[b]
Electricity	
Proposed Project and project-related offsite improvements:	
Container/Enclosure Energy	17,111 MWh
Water Conveyance	479 MWh
Total Electricity	***17,590 MWh***
Natural Gas	
Proposed Project and project-related offsite improvements:	
Emergency Generator	30 million cf
Total Natural Gas	***30 million cf***

NOTES:
MWh = megawatt-hours; million cf = million cubic feet
Detailed calculations are provided in **Appendix A** of this IS/MND.
a. Project electricity and natural gas estimates assume compliance with applicable 2019 Title 24 and CALGreen requirements.
b. Totals may not add up due to rounding of decimals.
SOURCE: ESA 2023

The proposed project and project-related offsite improvements would increase demand for electricity including what is needed to support the HVAC system for the container/enclosures, security lighting, and electronics. As shown in Table 8, the proposed project and project-related offsite improvements would result in an annual consumption of electricity of approximately 17,590 MWh per year, which would represent approximately 0.0176 percent of SCE's total sales of 100,143 GWh in 2026 (SCE 2022).

The proposed project and project-related offsite improvements has been evaluated for consistency with the Energy Efficiency Climate Action Plan (EECAP). According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits, increasing energy efficiency through water efficiency, and decreasing energy demand through reducing the urban heat island effect (City of Carson 2015). Consistent with this strategy, the proposed project and project-related offsite improvements would install lighting and a ventilation system that conforms to the CALGreen Code and Title 24 Standards. In addition, the proposed project and project-related offsite improvements would include approximately 14,092 square feet of landscaping. These features would be consistent with energy reduction strategies in the City's EECAP. Therefore, with the incorporation of these features, operation of the proposed project and project-related offsite improvements would not result in the wasteful, inefficient, and unnecessary consumption of electricity, and impacts would be less than significant.

The proposed project and project-related offsite improvements would increase the demand for natural gas resources. As shown in Table 8, the estimated operational natural gas demand of the proposed project and project-related offsite improvements is 30 million cubic feet, which represents 0.004 percent of Southern California Gas Company's (SoCalGas's) projected supply of 821,615 million cubic feet in 2026 (California Gas and Electric Utilities 2022). As would be the case with electricity, the proposed project and project-related offsite improvements would comply with the applicable provisions of Title 24, City of Carson's EECAP, and the CALGreen Code in effect at the time of building occupancy to minimize natural gas demand. As such, the proposed project and project-related offsite improvements would minimize energy demand. Therefore, with the incorporation of these features, operation of the proposed project and project-related offsite improvements would not result in the wasteful, inefficient, and unnecessary consumption of natural gas, and impacts would be less than significant.

The proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, during operation of the proposed project and project-related offsite improvements, minimal amounts of transportation fuels relative to the existing site conditions for gasoline and diesel would be consumed. Therefore, the proposed project and project-related offsite improvements would not increase demand for transportation fuels relative to existing site conditions for gasoline and diesel.

The project site consists of approximately 6.96 acres on one parcel that is currently developed with an aggregate recycling center. The project site is bordered by Alameda Street to the west, industrial uses to the north and south, and the Dominguez Channel to the east. Access to the project site would be provided by an existing driveway on Alameda Street between East Sepulveda Boulevard and East 223rd Street. The project site and project-related offsite improvements are located adjacent to a variety of existing transportation facilities. I-405 provides the primary regional access to the project site; major arterials that would be used for local access to the project site include East Sepulveda Boulevard and East 223rd Street in the east/west direction and Alameda Street in the north/south direction.

The gen-tie line would interconnect the proposed project to the existing SCE Hinson Substation. The proposed gen-tie route would cross three jurisdictions including: the City of Carson, the City of Los Angeles, and the City of Long Beach. The SCE Hinson Substation or point of interconnection is located approximately 0.62 miles to the northeast in the City of Long Beach. The new SCE TSP would be installed adjacent to the existing transmission overhead structures with existing access paths. The SCE Hinson Substation can be accessed from multiple locations, with the access during construction through an existing gate at the UPRR property to the east. For maintenance, access would be from Webster Avenue onto an existing dirt road traveling south along the east side of the SCE Hinson Substation and along the south side of the SCE Hinson Substation to the property on the west side.

No transit routes are located adjacent to the project site and project-related offsite improvements. The nearest transit route is Long Beach Transit Route 8, located approximately 0.8-mile northwest of the project site. The proposed project and project-related offsite improvements would not have any onsite employees but rather monitored remotely.

Based on the above, operation of the proposed project and project-related offsite improvements would not result in the wasteful, inefficient, and unnecessary consumption of transportation fuel, and impacts would be less than significant.

b) The proposed project and project-related offsite improvements would use construction contractors who demonstrate compliance with applicable regulations. Construction equipment would comply with federal, State, and regional requirements where applicable. With respect to truck fleet operators, the USEPA and NHSTA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type (USEPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA 2016). The energy modeling for trucks does

not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy.

As previously noted, the electricity required to power the proposed project and project-related offsite improvements would be obtained internally and each individual enclosure would be directly connected to the energy storage system's discharge and would not require additional electrical input. However, this analysis conservatively assumes the proposed project and project-related offsite improvements would be connected to the local utility provider. The State and the City have implemented energy policies relevant to the proposed project and project-related offsite improvements. The California Renewables Portfolio Standard (RPS) was established in 2002 and required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2013. Senate Bill (SB) 350 (Chapter 547, Statues of 2015) is the most recent update to the State's RPS requirements. The RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. The proposed project and project-related offsite improvements would comply with the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance. As of February 2019, the City receives electricity from Clean Power Alliance (CPA) and is enrolled in their 50 percent renewable electricity option. Customers have the choice to opt for a lower renewable energy mix (36 percent), opt for a higher renewable energy mix (100 percent), or opt out and receive electricity from SCE (CPA 2018). The energy analysis conservatively assumes the proposed project and project-related offsite improvements would remain with SCE as their electricity provider and does not take additional credit for renewable energy beyond the expected SCE renewable energy percentage for year 2024 based on the required renewables by year 2024 under SB 100.[4] Therefore, the electricity provided to the City meets or exceeds RPS requirements.

[4] For the purposes of estimating energy demand, the analysis conservatively assumes the proposed project would not switch electricity providers from SCE to the CPA (i.e., does not take any credit for 36 percent, 50 percent, or 100 percent renewable electricity, depending on the selected CPA plan). Should the proposed project switch electricity providers from SCE to the CPA, the proposed project's electricity-related emissions would be lower than those disclosed in this section.

As discussed above, the proposed project and project-related offsite improvements would comply with the applicable provisions of Title 24 Standards, City of Carson's EECAP, and the CALGreen Code in effect at the time of building occupancy. As such, the proposed project and project-related offsite improvements would minimize energy demand. Further, as discussed in Section III, *Air Quality*, of this IS/MND, the proposed project and project-related offsite improvements would be unoccupied and monitored remotely no new employees. As discussed in Section XVII, *Transportation*, of this IS/MND, the proposed project and project-related offsite improvements would not have a significant impact on transportation in the project vicinity. Additionally, the proposed project and project-related offsite improvements would comply with State and local regulations to reduce energy consumption, the proposed project and project-related offsite improvements would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

VII. Geology and Soils

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
GEOLOGY AND SOILS— Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

This section is based on the CEQA Geotechnical Input for Avocet Energy Storage LLC letter, prepared by Globus Engineering Inc. (Globus), dated December 22, 2022 (refer to **Appendix E** of this IS/MND). A Paleontological Resources Assessment was also conducted for the project by ESA in November 2023 (refer to **Appendix F** of this IS/MND).

Discussion

a.i) The project site is located in the seismically active Southern California region; however, it is not within an Alquist-Priolo Zone, and no surface faults are known to be within the project site (Globus 2022). The City's General Plan Regional Fault Map indicates that the project site is not located within any fault zones (City of Carson 2004). In addition, the project-related offsite improvements would not be located within any fault zones (California Geological Survey [CGS] 2023).

Furthermore, the design and construction would be required to conform to the current seismic design provisions of the City's Building Code, which incorporate relevant provisions of the 2019 California Building Code (CBC), along with the building codes of the City of Los Angeles and the City of Long Beach. The 2019 CBC, as amended by the City of Carson's Building Code, incorporates seismic design standards for structural

loads and materials to provide for the latest earthquake safety. With adherence to the CBC, California seismic design requirements would be included in the design of the proposed project and project-related offsite improvements. Operation of the proposed project and project-related offsite improvements would not involve substantial ground disturbance or installation of new features that would expose people or structures to seismic hazards. Therefore, impacts associated with rupture of a known earthquake fault would be less than significant.

a.ii) The entire Southern California region, including the project site and project-related offsite improvements, are susceptible to strong ground shaking from severe earthquakes. The level of ground shaking that would be experienced at the project site and project-related offsite improvements from active or potentially active faults or blind thrust faults in the region would be a function of several factors including earthquake magnitude, type of faulting, rupture propagation path, distance from the epicenter, earthquake depth, duration of shaking, site topography, and site geology. The project's design would be reviewed and approved by City of Carson's Building Department before construction permits are issued to ensure the proposed project is constructed in accordance with the CBC, and City's Building Code, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible. The design of the project-related offsite improvements would be reviewed by the building departments of the City of Los Angeles and the City of Long Beach. Therefore, a less-than-significant impact associated with strong seismic ground shaking would occur.

a.iii) Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Specifically, liquefaction occurs when the shock waves from an earthquake of sufficient magnitude and duration compact and decrease the volume of the soil; if drainage cannot occur, this reduction in soil volume will increase the pressure exerted on the water contained in the soil, forcing it upward to the ground surface. This process can transform stable soil material into a fluid-like state. This fluid-like state can result in horizontal and vertical movements of soils and building foundations from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. Liquefaction occurs when three general conditions exist: (1) shallow groundwater; (2) low-density non-cohesive (granular) soils; and (3) high-intensity ground motion.

The subsurface soils at the project site include loose granular soils and weak clayey soils related to recent alluvial deposits. Based on a review of maps published by the State, the historically high groundwater level at the site is expected to be roughly 20 feet bgs (Globus 2022). Based on the Phase 1 prepared for the project site, groundwater has been reported to be present at depths ranging from approximately 10 to 80 feet below ground surface (bgs) (**Appendix G1** of this IS/MND). Based on the Phase 1 prepared for the gen-tie route, a perched groundwater zone was observed at the depth of approximately 30 feet bgs, followed by a deeper groundwater zone at depths of 60 to 100 feet bgs. A review of the State of California Seismic Hazard Zone Map for the Long Beach Quadrangle (CGS

1999) indicates that the proposed upgrades to the existing SCE Hinson Substation within Long Beach's jurisdiction is located in an area designated as having a potential for liquefaction. The project site and project-related offsite improvements are located within an area that has a potential for liquefaction (California Geological Survey [CGS] 2023). During construction of the proposed BESS and main power transformer, excavation would occur up to a maximum depth of 5 feet bgs. The loss of bearing capacity of foundations resulting from liquefaction would be expected to be relatively minor for the proposed project's shallow foundations due to a buffer created by the roughly 20 feet of non-liquefiable soils above the groundwater (**Appendix E** of this IS/MND). During construction of the gen-tie poles for the proposed gen-tie line, excavation would occur up to a maximum depth of 50 feet bgs. The proposed project and project-related offsite improvements would be constructed in accordance with the CBC, and thereby the building codes of the cities of Carson, Los Angeles, and Long Beach, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible, including liquefaction. In addition, compliance with the recommendations identified in **Appendix E** of this IS/MND, including design measures such as soil improvement, use of large, combined mat foundations, flexible utility connections, and strategic placement of facilities within the site area would further assist in addressing potential liquefaction impacts. As such, the proposed project and project-related offsite improvements would not expose additional people or structures to potential substantial adverse effects associated with liquefaction. Therefore, a less-than-significant impact associated with liquefaction would occur.

a.iv) Due to the relatively flat topography of the project site, project-related offsite improvements, and surrounding area, the proposed project and project-related offsite improvements would not expose people or structures to potential landslides. In addition, the hazard zone map published by the State for the Long Beach Quadrangle does not show any seismically-induced landslide hazard zone in the project area (Globus 2022). Furthermore, the proposed project and project-related offsite improvements would be constructed in accordance with the CBC, and the building codes of the cities of Carson, Los Angeles, and Long Beach. As such, a less-than-significant impact associated with the potential for landslides would occur.

b) The project site is currently developed with an aggregate recycling center and contains large areas of exposed soil. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. The slopes along the Dominguez Channel are maintained by Los Angeles County to minimize erosion (Globus 2022). Prior to initial construction mobilization, pre-construction surveys would be performed, and sediment and erosion controls would be installed in accordance with State and City guidelines. As the proposed project would disturb more than 1 acre of soil, the proposed project would be subject to the requirements of the National Pollution Elimination Discharge System (NPDES), which would require preparation of a Stormwater Pollution Prevention Plan (SWPPP) for approval by the Los Angeles Regional Water Quality Control Board prior to construction.

The SWPPP would identify best management practices (BMPs) to be implemented with the proposed project in order to prevent erosion, minimize siltation impacts, and protect water quality. In addition, the construction contractor would be required to incorporate a soil erosion and sedimentation control plan to reduce potential construction impacts. The proposed project would also be subject to CMC Chapter 8, which contains the City's Storm Water Management and Discharge Control Ordinance. This ordinance is the City's tool to ensure the future health, safety, and general welfare of the citizens of the city and the water quality of the receiving waters of the County of Los Angeles and surrounding coastal areas. Due to the gen-tie connection to the existing SCE Hinson Substation, the proposed project would also be subject to Long Beach Municipal Code (LBMC) Chapter 8.96, Stormwater and Runoff Pollution Control, and LAMC Division 70, Grading, Excavation, and Fills, which contain specific requirements for erosion control and drainage devices. During proposed project operation, the project site would be largely developed with the BESS enclosures located on concrete pads, limiting the amount of exposed soils. The proposed project would be required to comply with the NPDES and CMC, LBMC, and LAMC requirements. Therefore, impacts associated with soil erosion or loss of topsoil would be less than significant.

c) The project site and project-related offsite improvements are located partially within an urbanized area characterized by a mix of industrial uses and partially within an open space area. As discussed previously, the project site and project-related offsite improvements are relatively flat and are not located within an area susceptible to landslides.

With regard to liquefaction, while the project site and project-related improvements are located within an area that has a potential for liquefaction, the proposed project and project-related offsite improvements would be designed to minimize the effects of settlement from liquefaction. In addition, the proposed project and project-related offsite improvements would be constructed in accordance with the CBC, and the building codes of the cities of Carson, Los Angeles, and Long Beach, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible, including liquefaction. Grading and foundation design would be required to comply with the buildings codes of the cities of Carson, Los Angeles, and Long Beach to minimize the effects of lateral spreading.

The project site and project-related offsite improvements are not located within an area of known ground subsidence and no large-scale extraction of groundwater, gas, oil, or geothermal energy that could result in subsidence would occur. As such, there is no potential for subsidence on the project site or project-related offsite improvements.

Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. As with liquefaction and lateral spreading, design recommendations and compliance with the building codes of the cities of Carson, Los Angeles, and Long Beach, would minimize the effects of collapse. Conformance with standard engineering practices and design

criteria would ensure that the proposed project and project-related offsite improvements does not exacerbate existing conditions. Therefore, impacts related to geologic unit or soil that is unstable would be less than significant.

d) Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. Such soils can expose overlying buildings to differential settlement and other structural damage. The subsurface soils at the project site include clayey soils that can be expansive under certain conditions (**Appendix E** of this IS/MND). The Design measure recommendations, including soil improvement and/or stabilization, use of large mat foundations, and flexible connections, which would minimize impacts from expansive soils would be implemented during final design. Conformance with the CBC, and the buildings codes of the cities of Carson, Los Angeles, and Long Beach, as well as design measures would reduce the potential for substantial risks to life or property as a result of expansive soils. Therefore, impacts would be less than significant.

e) The project site and project-related offsite improvements are located partially within an urbanized area currently developed with an aggregate recycling center and partially within an open space area and are served by community water and sewer service. Furthermore, no septic tanks or alternative wastewater disposal systems are in use or would be required under the proposed project and project-related offsite improvements. Therefore, no impact would occur.

f) A Paleontological Resources Assessment was conducted for the proposed project in November 2023 (ESA, 2023). The assessment includes a geologic map review, literature review, a paleontological resources database search by the Natural History Museum of Los Angeles County (LACM) and a paleontological sensitivity analysis.

Review of the geologic map shows that most of the proposed site and project-related offsite improvements lies with the Younger Quaternary Alluvium (unit 2) (Qya2). No details are provided on the units though the correlation chart tentatively assigns unit 2 to the early Holocene. A small portion of the gen-tie line in the south lies upon older alluvium (Qoa), believed to be Pleistocene in age. The western border of the proposed project, the low area of the Dominguez Channel, is underlain by young alluvial fans (Qyf).

The literature review indicates that while there are no additional reports of Pleistocene fossils from the immediate area, there is a rich record of Ice Age terrestrial faunas from the greater Los Angeles Basin—not including the unique La Brea Tar Pits (Jefferson 1991a, 1991b; McDonald and Jefferson 2008; Miller 1971; Reynolds and Reynolds 1991; Springer et al. 2009). These Ice Age terrestrial deposits include megafauna such as mammoth, mastodon, giant ground sloth, camel, and bison, as well as smaller peccary, rodents, turtles, and salamander (Graham and Lundelius 1994; Hudson and Brattstrom 1977; Jefferson 1991a, 1991b). These reports have been critical in showing the impacts

of climate change (Roy et al. 1996) and extinction (Scott 2010; Sandom et al. 2014) and substantiate the value of protecting and studying the paleontological record of the region.

Results of the paleontological resources records search conducted by the LACM indicated that no fossil localities lie directly within the project site and project-related offsite improvements; however, several fossil localities (LACM VP 3245, 3319, 3382, 3550, 3660, 4129 and LACM IP 423, 2668) were identified nearby from the same sedimentary deposits occurring in the project site and project-related offsite improvements either at surface or depth. These fossil localities are located approximately between 0.50 and 4.9 miles away from the project site and project-related offsite improvements and yielded fossils specimens of mammoth, elephant family, camel family, fish, seal clade from depths between 19 and 48 feet bgs. These fossil localities were found within Pleistocene deposits and Palos Verdes Sand (Bell, 2023).

The geologic mapping review, as well as the LACM records search results, were used to assign paleontological sensitivity to the geologic units at surface and underlying the project site and project-related offsite improvements following the guidelines of the Society of Vertebrate Paleontology (SVP, 2010). The paleontological sensitivity analysis indicates that young alluvial fans (Qyf) found along the western border of the proposed project, are assigned a Low Potential due to their young age. Younger Holocene alluvium (Qya_2) is found throughout the valley and bounded outside the proposed project by uplifted regions of older Pleistocene marine and non-marine deposits. While these Pleistocene units likely underlie the younger, Holocene alluvium in the project site and project-related offsite improvements, the depth is unknown but most likely lies approximately 20 feet below the surface based on records from the LACM. This unit is assigned a Low Potential to contain paleontological resources due to its age but likely increases with depth. Older alluvium (Qoa) deposits are found in the southern portion of the gen-tie line. This unit has produced significant fossils locally and throughout the greater Los Angeles basin. This unit is assigned a High Potential to contain paleontological resources due to its age, environments, and known fossils.

Should paleontological resources be encountered, the proposed project and project-related offsite improvements could directly or indirectly destroy a unique paleontological resource or site. No unique geologic features are known to be present in the project site and project-related offsite improvements. With implementation of Mitigation Measures PALEO-1 through PALEO-4, which require retention of a qualified paleontologist, construction worker paleontological resources sensitivity training, paleontological monitoring of excavations exceeding 20 feet in Quaternary alluvium and all excavations in the older alluvium in the southern portion of the gen-tie line route, procedures to follow in the event of the discovery of paleontological resources, salvage and curation of significant fossil discoveries, and final reporting, impacts to paleontological resources would be less than significant.

Mitigation Measure PALEO-1: The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist (Qualified Paleontologist) to carry out all mitigation related to

paleontological resources. Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be specifically encountered in Pleistocene to early Holocene alluvial deposits, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The City of Carson shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

Mitigation Measure PALEO-2: Paleontological monitoring shall be conducted during ground-disturbing activities below 20 feet in Quaternary alluvium (Qyf and Qya2) and at all depths within the older alluvium (Qoa) at the surface along the southern portion of the gen-tie line as depicted in Figure 5, Geologic Map, of the Paleontological Resources Assessment (**Appendix F** of the IS/MND). Monitoring shall be conducted by a qualified paleontological monitor (SVP, 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.

Mitigation Measure PALEO-3: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.

Mitigation Measure PALEO-4: At the conclusion of paleontological monitoring and prior to the release of the grading bond, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their

significance. The report shall be submitted by the Qualified Paleontologist to the City of Carson and the Natural History Museum of Los Angeles County to signify the satisfactory completion of the project and required mitigation measures.

VIII. Greenhouse Gas Emissions

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
GREENHOUSE GAS EMISSIONS— Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

a,b) Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The State of California defines GHGs as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, CH_4 has a GWP of 25 (over a 100-year period); therefore, 1 metric ton (MT) of CH_4 is equivalent to 25 MT of CO_2 equivalents ($MTCO_2e$). The State uses the GWP ratios available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and published in the *Fourth Assessment Report* (AR4). By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO_2e.[5]

According to the California Environmental Protection Agency (CalEPA), the potential impacts in California due to global climate change may include loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (CalEPA 2006). Globally, climate change has the potential to

[5] A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

- Higher maximum temperatures and more hot days over nearly all land areas
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas
- Reduced diurnal temperature range over most land areas
- Increase of heat index over land areas
- More intense precipitation events

There are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

Based on the 2020 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 369.2 $MMTCO_2e$ (CARB 2022). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2020, accounting for almost 37 percent of total GHG emissions in the State. This sector was followed by the electric power sector (16 percent) and the industrial emissions (20 percent) (CARB 2022).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

The City of Carson has not adopted a threshold of significance for GHG emissions that would be applicable to the proposed project and project-related offsite improvements. In December 2008, the SCAQMD adopted a 10,000 $MTCO_2e$ per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, nor a uniform methodology for analyzing impacts related to GHG emissions on global climate change. In the absence of any applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the proposed project's and project-related offsite improvement's impacts related to GHG emissions focuses on its consistency with State, regional, and local plans adopted for the purpose of reducing

and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the proposed project's and project-related offsite improvement's GHG-related impacts on the environment. Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the proposed project and project-related offsite improvements using recommended air quality models, as described below. The primary purpose of quantifying the proposed project's and project-related offsite improvement's GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. However, the significance of the proposed project's and project-related offsite improvement's GHG emissions impacts is not based on the amount of GHG emissions resulting from the proposed project and project-related offsite improvements. Consistent with SCAQMD guidance, total emissions from construction are amortized over an assumed project lifetime of 30 years and added to operational emissions (SCAQMD 2008).

CEQA Guidelines 15064.4 (b)(1) states that a lead agency may use a model or methodology to quantify GHGs associated with a project. In April 2022, the SCAQMD in conjunction with CAPCOA released the latest version of the CalEEMod (Version 2022). The purpose of this model is to estimate construction-source and operational-source emissions from direct and indirect sources. Accordingly, the latest version of CalEEMod has been used for this proposed project and project-related offsite improvements to estimate the proposed emissions. Construction and operations mobile emissions were estimated using EMFAC2021 (refer to **Appendix A** of this IS/MND for additional details).

Construction Emissions

Construction activities associated with the proposed project and project-related offsite improvements would result in emissions of CO_2 and, to a lesser extent, CH_4 and N_2O. Construction-period GHG emissions were quantified based on the same construction schedule and activities as described above in Section III (b). To amortize the emissions over the life of a project, the SCAQMD recommends calculating the total GHG emissions attributable to construction activities, dividing it by a 30-year project life, and then adding that number to a project's annual operational-phase GHG emissions. As such, construction emissions were amortized over a 30-year period and included in the annual operational-phase GHG emissions for the proposed project and project-related offsite improvements.

Operational Emissions

GHG Emissions

Operational activities associated with the proposed project and project-related offsite improvements would result in emissions of CO_2 and, to a lesser extent CH_4 and N_2O. Operational sources of GHG emissions would include indirect GHG emissions from export of electricity, water consumption, and waste generation. The proposed project and project-related offsite improvements would be unoccupied and monitored remotely.

Minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. Therefore, minimal amounts of GHG emissions were assumed from mobile sources.

Emissions of GHGs also resulted from the consumption of fossil fuels to generate electricity and to provide cooling and heating to the project site and project-related offsite improvements. The proposed project and project-related offsite improvements electricity demands are supplied by SCE, which indicates their renewable power accounted for 33.2 percent in 2022 (SCE 2023).

GHG emissions from solid waste disposal are also calculated using CalEEMod. Emissions are based on solid waste calculated for the proposed project and project-related offsite improvements and the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for CH_4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery) are statewide averages and are used in this assessment.

Emissions Summary

The annual GHG emissions of the proposed project and project-related offsite improvements are shown in **Table 9, Annual Project Greenhouse Gas Emissions**. As shown, the total GHG emissions for the proposed project and project-related offsite improvements would be 1,620 $MTCO_2e$. GHG emission calculations are provided in **Appendix A** of this IS/MND.

TABLE 9
ANNUAL PROJECT GREENHOUSE GAS EMISSIONS

Emissions Sources	CO_2e (Metric Tons per Year)[a]
Area	6
Energy (Electricity, Natural Gas)	1,262
Waste	117
Water	171
Emergency Generator	3
Construction[b]	62
Project Total GHG Emissions	***1,620***

NOTES:

a. Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.

b. Construction emissions are amortized over 30 years.

SOURCE: ESA 2023

The City of Carson General Plan does not identify specific GHG or climate change policies or goals. In the absence of any adopted, quantitative threshold, the proposed project and project-related offsite improvements would not have a significant effect on the environment if the proposed project and project-related offsite improvements is found to be consistent with the applicable regulatory plans and policies to reduce GHG

emissions, including CARB's 2022 Scoping Plan for Carbon Neutrality (Scoping Plan), SCAG's 2020–2045 RTP/SCS, and the City's Energy Efficiency Climate Action Plans (EECAP).

The EECAP, developed by the South Bay Cities Council of Governments, aims to implement energy efficiency and GHG reduction efforts (City of Carson 2015). The proposed project and project-related offsite improvements has been evaluated for consistency with the EECAP. According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits (City of Carson 2015). Consistent with the strategies identified in the EECAP, the proposed project and project-related offsite improvements would install lighting and a ventilation system that conforms to the California Green Building Code and include approximately 14,092 square feet of landscaping along the entrance of the project site. Therefore, the proposed project and project-related offsite improvements would be consistent with the applicable GHG reduction strategies in the City's EECAP.

As shown in Table 9 above, the highest GHG contributors for the proposed project and project-related offsite improvements are from energy sources. This is a highly regulated source with measures implemented in CARB's 2022 Scoping Plan to reduce GHG emissions from each sector.

With respect to energy, the RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. SCE, the utility provider for the project site and project-related offsite improvements, reported 33.2 percent of their power from renewable sources (SCE 2023). Therefore, GHG emissions from electricity consumption would decrease in future years.

As previously stated, the proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic visits would be conducted for on-site equipment inspections, monitoring and testing. However, any mobile sources including those during construction are also highly regulated. In January 2007, the California Governor enacted Executive Order S-01-07, which mandates the following: (1) establish a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) adopt a Low Carbon Fuel Standard (LCFS) for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the 2017 Climate Change Scoping Plan.

The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), adopted by CARB in December 2022, expands on prior Scoping Plans and responds to more recent legislation by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier (CARB 2022). The major element of the 2022 Scoping Plan is the decarbonization of every sector

of the economy. This requires rapidly moving to zero-emission transportation for cars, buses, trains, and trucks; phasing out the use of fossil gas for heating; clamping down on chemicals and refrigerants; providing communities with sustainable options such as walking, biking, and public transit to reduce reliance on cars; continuing to build out solar arrays, wind turbine capacity, and other resources to provide clean, renewable energy to displace fossil-fuel fired electrical generation; scaling up new options such as renewable hydrogen for hard-to-electrify end uses and biomethane where needed.

Table 10, Project Conflict Analysis with Applicable 2022 Scoping Plan Actions and Strategies, contain a list of GHG-reducing strategies as they relate to the proposed project and project-related offsite improvements. The analysis describes the consistency of the proposed project and project-related offsite improvements with these strategies that support the State's strategies in the Climate Change Scoping Plan to reduce GHG emissions. The Climate Change Scoping Plan relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program. As shown below, the proposed project and project-related offsite improvements will incorporate characteristics to reduce energy, conserve water, reduce waste generation, and reduce vehicle travel consistent with statewide strategies and regulations. As a result, the proposed project and project-related offsite improvements would not conflict with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

The 2020–2045 RTP/SCS includes "more compact, infill, walkable and mixed-use development strategies to accommodate new region's growth would be encouraged to accommodate increases in population, households, employment, and travel demand." Moreover, the 2020–2045 RTP/SCS states the focus would be "growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions."

The proposed project and project-related offsite improvements would not conflict with the 2020–2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions. Therefore, the proposed project and project-related offsite improvements would not conflict with the GHG reduction-related actions and strategies contained in the 2020–2045 RTP/SCS.

The project site is located on one parcel within the City of Carson which is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. As previously stated, the proposed project is an energy storage facility that would provide

energy storage capacity and dispatch for the electricity grid. The project site and project-related offsite improvements would be unoccupied and monitored remotely. Minimal vehicle trips would be generated during periodic visits for on-site equipment inspections, monitoring and testing. Therefore, the proposed use would not conflict with the 2020-2045 RTP/SCS goals related to reducing vehicle trips.

TABLE 10
PROJECT CONFLICT ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

Actions and Strategies	Conflict Analysis
Increase in Renewable Energy and Decrease in Oil and Gas Use Actions	**No Conflict.** This goal applies to increasing renewable energy and a decrease in oil and gas actions. The proposed project is an energy storage facility that would provide energy storage capacity and dispatch for the electricity grid. In addition, the electricity required to power the proposed project and project-related offsite improvements would be obtained internally and each individual enclosure would be directly connected to the energy storage system's discharge and would not require additional electrical.
Low Carbon Fuels Actions	**No Conflict.** The proposed project and project-related offsite improvements would generate minimal vehicle trips during periodic visits for on-site equipment inspections, monitoring and testing. Vehicles accessing the proposed project and project-related offsite improvements, including construction vehicles and trucks, employees, and delivery service trucks would utilize fuels that comply with the State of California low carbon fuel standard. Thus, the proposed project and project-related offsite improvements would not conflict with the State's ability to implement the low carbon fuel standard.
Expansion of Electrical Infrastructure Actions	**No Conflict.** The proposed project is an energy storage facility that would provide energy storage capacity and dispatch for the electricity grid. The proposed project would require the addition of two fiber telecommunication lines and a gen-tie line to transfer power between the SCE Hinson Substation and the proposed project. However, these would benefit the State and SCE's compliance with providing renewal energy.
Climate Ready and Climate-Friendly Buildings	**No Conflict.** The proposed project is an energy storage facility and does not include residential units. As such, this action does not apply to the proposed project and project-related offsite improvements.
Expanded Use of Zero-Emission Mobile Source Technology Actions	**No Conflict.** The proposed project is an energy storage facility that would provide energy storage capacity and dispatch for the electricity grid. The proposed project and project-related offsite improvements would support this action by providing SCE with renewable energy stored at the project site and project-related offsite improvements that could be used for electric vehicle charging stations. Further, the proposed project and project-related offsite improvements would benefit from implementation of the Advanced Clean Cars Program that would reduce passenger vehicle GHG emissions, as well as the Advanced Clean Truck Regulation that aims to increase zero-emissions truck sales annually.
Mechanical Carbon Dioxide Removal and Carbon Capture and Sequestration Actions	**No Conflict.** The proposed project would retain the existing landscaping on site and replace approximately 4,019 sf of existing landscaping would be rehabilitated with low water climate adopted plants along with five new trees. As such, the proposed project would increase carbon sequestration. The proposed project and project-related offsite improvements would support this action and would not conflict with the State's ability to reduce Statewide GHG emissions through carbon removal and sequestration actions.
Improvements to Oil and Gas Facilities Actions	**Not Applicable.** The proposed project is an energy storage facility that would provide energy storage capacity and dispatch for the electricity grid. The proposed project and project-related offsite improvements does not include improvements to oil and gas facilities. As such, this action does not apply to the proposed project and project-related offsite improvements.
Reduced High-GWP Fluorinated Gases Actions	**No Conflict.** This action includes expanding use of low-GWP refrigerants within buildings; increasing funding to decarbonize existing buildings and appliance replacements; and implementing biomethane procurement targets for investor-owned utilities. The proposed project and project-related offsite improvements has no jurisdiction over this action. However, the proposed project would utilize

Actions and Strategies	Conflict Analysis
	refrigerants within the proposed enclosures (e.g., air conditioning systems) in compliance with applicable State and local regulations and as such, the proposed project and project-related offsite improvements would not conflict with the State's ability to achieve GHG reductions under this action.
Forest, Shrubland, and Grassland Management Actions	**No Conflict.** This action involves increasing the urban forestry investment annually by 200 percent relative to business as usual. The landscaping at the project site would include five new trees as well as retain the existing landscaping. The proposed project will introduce low water climate adapted plants. The proposed project and project-related offsite improvements would support this action and would not conflict with the State's ability to reduce Statewide GHG emissions through urban forestry actions.
Agricultural Actions	**Not Applicable.** This action involves increasing climate smart forest, shrubland, and grassland management to at least 2.3 million acres a year−an approximately 10x increase from current levels. The proposed project and project-related offsite improvements is in an urban center and would have no agricultural uses. As such, this action does not apply to the proposed project and project-related offsite improvements.
Organic Waste Diversion and Composing Actions	**No Conflict.** The proposed project is an unoccupied energy storage facility that would provide energy storage capacity and dispatch for the electricity grid. The proposed project and project-related offsite improvements is not anticipated to generate organic waste. As such, the proposed project and project-related offsite improvements would not conflict with this goal.
Afforestation, Urban Forestry Expansion, Urban Greening, Avoided Natural and Working Land Use Conversion, and Wetland Restoration Actions	**No Conflict.** The landscaping at the project site would include five new trees and the rehabilitation of approximately 4,019 sf of landscaping with low water climate adapted plants. Additionally, the proposed project and project-related offsite improvements is not located on natural or working lands. The proposed project and project-related offsite improvements would support this action and would not conflict with the State's ability to reduce Statewide GHG emissions through urban forestry actions.
Reduced VMT Actions	**No Conflict.** The proposed project would be unoccupied and monitored remotely. Minimal vehicle trips would be generated during periodic visits for on-site equipment inspections, monitoring and testing. Thus, the proposed project and project-related offsite improvements would not conflict with the State's ability to reduce VMT.

SOURCE: ESA, 2023

Overall, the proposed project and project-related offsite improvements would not conflict with CARB's implementation of the LCFS or the 2022 Scoping Plan, the City's EECAP, and it would not conflict with SCAG's 2020–2045 RTP/SCS. Therefore, the proposed project and project-related offsite improvements would not conflict with an applicable plan, policy, or regulation to reduce GHG emissions. As such, impacts would be less than significant.

IX. Hazards and Hazardous Materials

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
HAZARDS AND HAZARDOUS MATERIALS— Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

This section is based on the Phase I Environmental Site Assessments (ESA) prepared by Alta Environmental, dated September 30, 2021, and April 27, 2023 (refer to **Appendix G1 and G2** of this IS/MND).

Discussion

a) Exposure of the public or the environment to hazardous materials can occur through transportation accidents; environmentally unsound disposal methods; improper handling of hazardous materials or hazardous wastes (particularly by untrained personnel) during construction or operation. The severity of these potential effects varies by type of activity, concentration and/or type of hazardous materials or wastes, and proximity to sensitive receptors.

Construction

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies.

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act), requires preparation of hazardous materials business plans (HMBP)

and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). The LACFD is the local Certified Unified Program Agency (CUPA) with jurisdiction over the hazardous materials of the proposed project and project-related offsite improvements. The HMBP would be provided to the City and would include necessary information to prevent or mitigate possible environmental contamination or worker exposure. During proposed project construction, material safety data sheets for all applicable materials present at the site will be made readily available to on-site personnel.

Construction contractors would implement BMPs for handling hazardous materials during construction activities, including following manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction; avoiding overtopping construction equipment fuel tanks; routine maintenance of construction equipment; and properly disposing of discarded containers of fuels and other chemicals. Construction contractors are required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. Furthermore, all construction-related materials would be transported and disposed of in accordance with applicable codes and regulations.

Two Phase I Environmental Site Assessments (ESAs) were prepared by Alta Environmental for the project site and the gen-tie routes to assess the potential for implementation of the proposed project to result in impacts related to hazards and hazardous materials resulting from existing or historical conditions on or near the project site and gen-tie route (**Appendix G1** and **Appendix G2** of this IS/MND). The Phase I ESA (**Appendix G** of this IS/MND) identified recognized environmental conditions (RECs) in connection with the project site for the proposed BESS. A REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. If RECs or environmental issues in connection with hazards or hazardous materials on the project site or project-related offsite improvements are identified, the proposed project may result in a significant impact related to the creation of a hazard to the public or environment.

The Phase I ESA (**Appendix G1** of this IS/MND) identified title documentation associated with the project site indicating an environmental deed restriction has been placed on the site due to the potential presence of hazardous substances at, on or underneath the site. This deed restriction represents evidence of an REC that may result in significant impacts related to hazards or hazardous material to the public or environment (NV5 2021).

The Phase I (**Appendix G2** of this IS/MND) identified four areas of potential concern. Unless specifically identified, an area of potential concern does not indicate that a release

has occurred, only that there is the potential to impact the gen-tie route if a release has occurred.

The Montrose Chemical Corporation was a former dichlorodiphenyltrichloroethane (DDT) manufacturing plant located approximately five miles northwest of the gen-tie route original location. It was discovered that the DDT manufacturing work conducted at the facility had severely contaminated soil and groundwater beneath and nearby the former plant property. In 1989, the facility was listed as an EPA Superfund site. The major transport mechanisms identified were reports as storm water runoff and aerial emissions. Contamination was reported to have flowed off the facility into the Kenwood Stormwater Drainage Pathway and subsequently into the Domingues Channel, which is transected by the gen-tie route (NV5 2023).

The gen-tie route transects the present-day ICTF Intermodal Terminal, a large active rail and tractor trailer yard. It was constructed on a portion of the former Wilmington Classification and Holding Yard, a former military equipment loading and storage facility that operated in the 1940s. A site survey summary sheet prepared by the Army Corps of Engineers in 1999 noted that various types and sources of subsurface soil contamination had been previously identified in the railyard portion of the site. The types and locations of the soil contamination were not reported. The site survey summary sheet also included an evaluation for hazard severity associated with unexploded ordinance. The property was given a rating of "4" indicating negligible hazard; however, a score of "5" indicating a marginal hazard was also listed as recommended. According to records reviewed, this designation was primarily determined on the use of warehouse 17 (located over one mile from the gen-tie route) as an ordinance depot. While specific areas of contaminant at the ICTF Intermodal Terminal were not reported, it is not uncommon to encounter areas of shallow soil impacted from past releases/spills of hazardous substances and petroleum products as well as pesticides and herbicides applied as part of facility maintenance (NV5 2023).

The Marathon Carson Refinery is located approximately 500 feet west of the gen-tie route origin, across Alameda Street and the Union Pacific Railroad. According to the CPS-SLIC database, the facility is currently undergoing remediation of total petroleum hydrocarbons in groundwater. According to documents available on Geotracker, a release was identified at the facility as early as 1990 and various site investigations and remediation continue to be conducted for light non-aqueous phase liquid (LNAPL). The lateral and vertical extent of LNAPL contamination is still being assessed. Based on the documented extend of LNAPL contamination to groundwater, distance of the facility with respect to the gen-tie route, and the inherent environmental risk associated oil refining operations, this facility is considered to represent an area of potential concern for the gen-tie route (NV5 2023).

The properties adjoining the gen-tie route origin to the north and to the west were previously developed with a hydrogen gas plant (Air Products) between the early 1960s to the late 1990s. Historical records reviewed identified evidence of past hazardous

substances or petroleum products use at the hydrogen gas plant including documented releases of petroleum hydrocarbons and volatile organic compound (VOC)s from former underground storage tanks (USTs) and hydrogen production operations at the facility, along with evidence of potential off-site hydrocarbon releases and regional groundwater impact. These potential impacts were reported at both the portion of the hydrogen production facility located on the northern adjoining property, and at the portion of the facility located at the western adjoining property (primarily from surficial spills near a waste oil UST located on the eastern portion of the facility. These releases were subsequently remediated and granted case closure/no further action status. Additionally, during subsequent redevelopment 1,200 cubic yards of petroleum and lead impacted soil was excavated and removed from the northern adjoining property. Due to the elevated concentrations of soluble lead, the soil was classified as a California designated hazardous waste (NV5, 2023).

Although the proposed project and project-related offsite improvements would not be occupied once operational, these areas of potential concern have the potential to expose construction workers to significant hazards. However, construction of the proposed project and project-related offsite improvements would require compliance with the recommendations of the Phase I ESAs to reduce the potential of significant impacts. Specifically, prior to the start of construction activities, the proposed project proponent would conduct shallow soil sampling to the depth of proposed soil excavation to determine whether soils that will be disturbed contain elevated concentrations of hydrocarbons or lead. If sampling indicates elevated concentration of hydrocarbons or lead, construction workers in those areas of the site would require OSHA HAZWOPER certification for handling the specific hazardous conditions that would be encountered. Furthermore, the proposed project and project-related offsite improvements would comply with the requirements, responsibilities, and limitations of the property in accordance with the environmental deed restriction. Compliance with the recommendations provided in the Phase I ESAs, adherence to the HMBP, and implementation of BMPs, would ensure impacts related to the routine transport, use, or disposal of hazardous materials during proposed project construction, would be less than significant.

Operation

Operations at the proposed project and project-related offsite improvements would consist of periodic in-person equipment inspections, monitoring and testing, and maintenance as needed. However, outside of these periodic in person visits, the project site would be unoccupied. Limited amounts of hazardous materials will be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based batteries for emergency backup. Appropriate spill containment and cleanup kits would be maintained during operation of the proposed project and project-related offsite improvements. In addition to the HMBP that would be prepared for the proposed project and project-related offsite improvements, a spill prevention control and countermeasures (SPCC) plan and material disposal and solid waste management plan would also be developed for site

operations. Fuels and lubricants used in operations would be subject to the SPCC plan and solid waste, and if generated during operations, would be subject to the material disposal and solid waste management plan to be prepared for the proposed project and project-related offsite improvements.

The storage, use, transport and disposal of hazardous materials are regulated by applicable federal, State, and local regulations. Compliance with federal, State and local requirements would serve to minimize health and safety risks to people or structures associated with hazardous materials stored or used for operations of the proposed project and project-related offsite improvements. Therefore, operational impacts associated with the proposed project and project-related offsite improvements related to use, transport, storage, or disposal of hazardous materials would be less than significant.

b) ***Construction***

Construction of the proposed project and project-related offsite improvements would involve minimal uses of hazardous materials typical to construction, including gasoline, motor oils, paints, solvents, and other miscellaneous materials (e.g., engine oil, etc.). All potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The construction phase would involve the use of heavy equipment, which require small amounts of oil and fuels and other potential flammable substances. During construction, equipment would require refueling and minor maintenance on location that could lead to fuel and oil spills. The contractor would be required to identify a staging area for storing materials. Additionally, operators of heavy-duty equipment are trained to remain alert and nearby during fueling of equipment, and spills, should they occur, should not reach the off-site environment. Construction contractors would be required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. All construction-related materials would be transported and disposed of in accordance with applicable codes and regulations. Compliance with applicable federal, State, and local standards would be required; therefore, construction-related impacts related to accidental release of hazardous materials would be less than significant.

Operation

As discussed above, limited amounts of hazardous materials would be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based batteries for emergency backup. Appropriate spill containment and cleanup kits would be maintained during operation of the proposed project and project-related offsite improvements. In addition to the HMBP that would be prepared for the proposed project and project-related offsite improvements, an SPCC plan and material disposal and solid waste management plan would also be developed for site operations. Fuels and lubricants used in operations will be subject to the SPCC plan and solid waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the

proposed project and project-related offsite improvements. Additionally, the proposed project and project-related offsite improvements would be required to comply with federal, State, and local requirements, further minimizing the potential for an accidental release of hazardous materials. Therefore, operation-related impacts related to the accidental release of hazardous materials would be less than significant.

c) The nearest school is Webster Elementary located approximately 0.2 miles east from the proposed site. However, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Thus, the proposed project and project-related offsite improvements would not emit or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and no impact would occur.

d) As part of both Phase I ESAs (**Appendix G1** and **Appendix G2** of this IS/MND) prepared for the project site, regulatory databases were reviewed for the project site, gen-tie route and properties within the standard search radii as required by California Government Code Section 65962.5. The databases are known as the "Cortese List" and include EnviroStor, GeoTracker, and other lists compiled by the CalEPA. The project site is identified as a hazardous materials site within multiple databases (HWTS, HIST UST, HAZNET, SWEEPS UST, EMI, FINDS, CPS-SLIC, LUST, CA FID UST, Los Angeles CO. HMS, CERS, RGA LUST, ENVIROSTOR, HIST CORTESE, CIWQS, ECHO, WMUDS, SWAT, and RCRA NONGEN/NLR).

The proposed project's listing in these databases is primarily associated with the site's prior use as a hydrogen gas production facility, as further discussed above, under the response to Checklist Question IX.a, above. The portion of the proposed project located within the SCE Hinson Substation is not listed located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Compliance with the recommendations provided in the Phase I ESAs, adherence to the HMBP, and implementation of BMPs, would ensure the proposed project would not create a significant hazard to the public or environment, despite being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, impacts would be less than significant.

e) The project site and project-related offsite improvements are approximately 4.5 miles south of the Compton/Woodley Airport and approximately 3.3 miles west of the Long Beach Airport. The project area would not be located within the Airport Influence Area (Los Angeles County Airport Land Use Commission 2003). Therefore, the proposed project and project-related offsite improvements would not pose any airport safety hazards for people residing or working in the project area, and no impacts would occur.

f) The proposed project and project-related offsite improvements would not result in any permanent alterations to vehicular circulation routes or obstruct public access along adjacent roadways. All construction staging would occur within the boundaries of the project site and would not interfere with circulation along the adjacent roadways, or any other nearby roadways. The City has prepared a Multi-Hazard Functional Plan (1996) for emergency response within the city. The plan identifies emergency protocol, critical meeting areas, and emergency evacuation routes. The four major freeways (I-405, SR-91, I-110, and I-710) as well as arterial streets with right-of-way widths from 80 to 100 feet at one-half mile intervals would serve as potential evacuation routes during a disaster. Potential evacuation routes that are located near the site include East Sepulveda Boulevard and Alameda Street. The project site is not located directly along an evacuation route and operations under the proposed project and project-related offsite improvements would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts related to impairment or physical interference with an adopted emergency response plan or emergency evacuation plan, would be less than significant.

g) A significant impact would occur if the proposed project and project-related offsite improvements would expose people and structures to wildfire risks. According to the California Department of Forestry and Fire Protection's (CAL FIRE's) Very High Fire Hazard Severity Zone Map, the project site and project-related offsite improvements are not designated as a very high fire hazard severity zone (VHFHSZ) under local or State responsibility. Additionally, the project site, project-related offsite improvements, and surrounding area are built out and urbanized. The proposed project and project-related offsite improvements would be located in an urban setting, and thus is not anticipated to expose people or structures to a significant risk involving wildland fires. The gen-tie line that would be constructed as part of the proposed project may pose a potential wildfire ignition source. However, proposed project compliance with applicable wildland fire management plans and policies established by CAL FIRE and LACFD as well as the CPUC General Order 95: Overhead Electric Line Construction, which includes safety standards for overhead electric lines, including minimum distances for conductor spacing, minimum conductor ground clearance, standards for calculating maximum sag, electric line inspection requirements, and vegetation clearance requirements, would minimize the risk of wildfires. Therefore, impacts related to exposing people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, would be less than significant.

X. Hydrology and Water Quality

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
HYDROLOGY AND WATER QUALITY— Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of imperious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Discussion

a) The project site and project-related offsite improvements are located partially within an urbanized area of the City of Carson and City of Los Angeles and partially within an open space area within the City of Long Beach. The project site is currently developed as an aggregate recycling center and existing SCE Hinson Substation. As part of Clean Water Act Section 402, the USEPA has established regulations under the NPDES program to control direct stormwater discharges. In California, the State Water Regional Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. The project site and project-related offsite improvements are within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). Impacts related to water quality typically range over three different periods: (1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; (2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and (3) following completion of a project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

Construction

Construction of the proposed project and project-related offsite improvements could result in short-term impacts to water quality due to the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities. Potential pollutants associated with these activities could damage nearby waterbodies, such as the Dominguez Channel. Dischargers whose projects disturb 1 acre or more of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 acre or more, are required to obtain coverage under the SWRCB's General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2022-0057-DWQ (General Construction Permit). The General Construction Permit requires the project applicant to prepare and implement a SWPPP. The SWPPP would specify BMPs to be used during construction of the proposed project and project-related offsite improvements to minimize or avoid water pollution, thereby reducing potential short-term impacts to water quality. Upon completion of the proposed project, the project applicant would be required to submit a Notice of Termination to the SWRCB to indicate that construction has been completed. Further, proposed project and project-related offsite improvements construction activities would be required to comply with the water quality BMPs set forth in CMC Chapter 8, Storm Water and Urban Runoff Pollution Control. This chapter contains the City's Storm Water Management and Discharge Control Ordinance and includes conditions and requirements established to control urban pollutant runoff into the City's stormwater system. The proposed project and project-related offsite improvements would also be subject to the requirements for low impact developments (LIDs) and BMPs in LBMC Chapter 18.74, Low Impact Development Standards, and the LID practices and standards for stormwater pollution mitigation in LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. Compliance with the General Construction Permit requirements, CMC Chapter 8, Storm Water and Urban Runoff Pollution Control, LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control, would reduce the short-term impacts of the proposed project and project-related offsite improvements to surface water quality to less-than-significant levels.

As it relates to groundwater quality, there are potential groundwater impacts at the project site. An environmental deed restriction has been placed on the site due to the potential presence of hazardous substances at, on or underneath the site that places several restrictions on the property related to future development, use, and groundwater. Historically, high groundwater level on the project site is encountered at roughly 20 feet bgs, which would be below the proposed excavation of up to 5 feet on the project site. As such, construction of the proposed project and project-related offsite improvements would not disturb potentially contaminated groundwater under the project site. Therefore, the proposed project's short-term impacts to groundwater quality would be less than significant.

Operation

The primary constituents of concern during the operational phase of the proposed project and project-related offsite improvements would be solids, oils, and greases from the proposed paved access road and driveway that could be carried off site. Proposed project design features would address the anticipated and expected pollutants of concern during the operational phase of the proposed project and project-related offsite improvements. Existing on-site landscaping would minimize the amount of runoff from the project site by providing permeable areas for water infiltration and decrease runoff volume. Infiltration through this landscaped area would also serve as a water treatment function. In addition, the proposed BESS components would be enclosed within the storage containers, and battery fluids or substances would not be susceptible to spills or release as runoff.

Requirements for waste discharges potentially affecting stormwater from operations of the proposed project and project-related offsite improvements are set forth in CMC Chapter 8, Storm Water and Urban Runoff Pollution Control. These include Standard Urban Stormwater Mitigation Plan (SUSMP) requirements to minimize stormwater pollutants and limit peak post-project stormwater runoff rates to no greater than predevelopment rates where increased runoff could increase downstream erosion. The proposed project and project-related offsite improvements would also be subject to the requirements for LIDs and BMPs in LBMC Chapter 18.74, Low Impact Development Standards, and the LID practices and standards for stormwater pollution mitigation in LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control.

As noted above, an environmental deed restriction has been placed on the project site due to the potential presence of hazardous substances at, on or underneath the site and includes several restrictions on the property related to future development, use, and groundwater. Portions of the project site were previously developed with a hydrogen gas plant between the early 1960s to the late 1990s and were reported to include releases of petroleum hydrocarbons and VOCs from former USTs and hydrogen production operations at the facility along with evidence of potential regional groundwater impact. These releases were subsequently remediated and granted case closure/no further action status (NV5 2021).

In general, projects control pollutants, pollutant loads, and runoff volume from the sites by minimizing the impervious surface area and controlling runoff through infiltration, bioretention, or rainfall harvest and use. The proposed project and project-related offsite improvements would largely increase the amount of impervious surface on site as the site currently contains large, pervious areas of exposed soils. However, the proposed project and project-related offsite improvements would be required to incorporate BMPs as outlined in the SWPPP and in accordance with the requirements of the municipal NPDES permit. In addition, the existing landscaping on site would continue to assist with controlling runoff. Compliance with these water quality and water discharge standards would ensure that the proposed project and project-related offsite improvements would not degrade surface or ground water quality, and impacts would be less than significant.

b) The project site and project-related offsite improvements are located partially within an urbanized area and partially within an open space area. The project site is currently developed as an aggregate recycling center and existing SCE Hinson Substation. The existing project site consists of mostly pervious surfaces. With development of the proposed project, the project site would be largely impervious. However, although the amount of impervious surface would increase, the project site is not located near groundwater recharge wells and no groundwater recharge facilities exist downstream of the project site.

In addition, no new sources of water supply, such as groundwater, are required to meet the water demand of the proposed project and project-related offsite improvements. Water supply during construction would be supplied by purchase from the California Water Service (Cal Water) Dominguez District. Based on the 2020 Urban Water Management Plan (UWMP), the Cal Water Dominguez District receives its water from 17 percent groundwater, 15 percent recycled water, and 68 percent purchased water (Cal Water 2021). Operation of the proposed project and project-related offsite improvements would not result in a substantial increase in demand as the BESS would generate minimal water use for operation and maintenance activities. Therefore, implementation of the proposed project and project-related offsite improvements would not significantly affect groundwater supplies. Furthermore, as noted above, the project site and project-related improvements are not located near groundwater recharge wells and no groundwater recharge facilities exist downstream of the project site. Therefore, the proposed project and project-related offsite improvements would not substantially deplete groundwater supplies or interfere with groundwater recharge that may impede sustainable groundwater management of the basin. Impacts would be less than significant.

c.i) The Dominguez Channel is located to the east of the project site and to the west of the existing SCE Hinson Substation located in the City of Long Beach; a flood control easement separates the Dominguez Channel from the project site and where upgrades to the SCE Hinson Substation would occur. The project site is located in an urban area and is currently developed as an aggregate recycling center. The proposed gen-tie line would cross over the Dominguez Channel but would be left in its existing condition and avoided during both proposed project construction and operation. Therefore, the proposed project and project-related offsite improvements would not result in the alteration of any stream or river course. Existing surface runoff from the project site is currently directed to an existing storm drain inlet adjacent to the project site's western boundary along Alameda Street. Under the proposed project and project-related offsite improvements, the project site would drain to the proposed detention pond. Impervious surfaces would increase on site from existing conditions, which could increase runoff from the project site and result in hydromodification effects, such as erosion and siltation. As discussed above, during construction, the proposed project and project-related offsite improvements would be required to comply with BMP's identified in the RWQCB-issued SWPPP, which would reduce the potential for erosion or siltation to occur. In addition, the proposed project would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which would assist in limiting surface runoff from

the project site and reduce siltation and erosion. The proposed project would also be subject to the requirements for LIDs and BMPs in LBMC Chapter 18.74, Low Impact Development Standards, and the LID practices and standards for stormwater pollution mitigation in LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. During operation of the proposed project, the project site would be largely developed with the BESS, collector substation, paved access road, and existing landscaping and would not contain exposed soils. Furthermore, a detention pond is proposed adjacent to the O&M storage area in the southwestern corner of the BESS area, which would temporarily store stormwater to further reduce runoff and erosion. Therefore, compliance with BMPs, City ordinances, LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control, would ensure that the proposed project would not substantially alter the drainage pattern of the project site in a manner that would result in the substantial erosion or siltation on- or off-site, and impacts would be less than significant.

c.ii) The Dominguez Channel is located to the east of the BESS component project site and to the west of the portion of the project-related offsite improvements located in the City of Long Beach. The project site is located on one parcel within the City of Carson which is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. As discussed above in the response to Section X (c.i), the proposed gen-tie line would cross over the Dominguez Channel but would be left in its existing condition and avoided during both construction and operation of the proposed project. Therefore, the proposed project and project-related offsite improvements would not result in the alteration of any stream or river course. Surface runoff is currently directed to an existing storm drain inlet adjacent to the project site's western boundary along Alameda Street. Under the proposed project and project-related offsite improvements, impervious surfaces would largely increase on site from existing conditions, which could increase runoff from the project site and result in hydromodification effects, such as flooding. The proposed project would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which help prevent flood damage resulting from hydromodification by limiting surface runoff. Furthermore, a detention pond is proposed adjacent to the O&M storage area in the southwestern corner of the BESS area, which would temporarily store stormwater to further reduce runoff. The proposed project would also be subject to LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. Therefore, a less-than-significant impact resulting from flooding would occur.

c.iii) The project site is located in an urban area currently developed as an aggregate recycling center. The proposed gen-tie route would cross the cities of Carson, Los Angeles, and Long Beach to interconnect to the existing SCE Hinson Substation located in Long Beach. As discussed above in the response to Section X (c.i), the proposed gen-tie line would cross over the Dominguez Channel but would be left in its existing condition and

avoided during both construction and operation of the proposed project. Therefore, the proposed project and project-related offsite improvements would not result in the alteration of any stream or river course. As described above, surface runoff is currently directed to an existing storm drain inlet adjacent to the project site's western boundary along Alameda Street. As discussed above, the project applicant would be required to comply with the standard BMPs in the SWPPP, as identified by the RWQCB. Therefore, the proposed project and project-related offsite improvements would not provide substantial additional sources of polluted runoff, and potential impacts to surface water quality would be less than significant. Under the proposed project and project-related offsite improvements, impervious surfaces would increase on site from existing conditions, which could increase runoff from the project site and result in hydromodification effects, such as flooding. The proposed project would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which help prevent flood damage resulting from hydromodification by limiting surface runoff. Furthermore, a detention pond is proposed adjacent to the O&M storage area in the southwestern corner of the BESS area, which would temporarily store stormwater to further reduce runoff. The proposed project would also be subject to LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. Therefore, the proposed project would not exceed the capacity of existing or planned storm drain systems and impacts would be less than significant.

c.iv) As discussed above in the response to Section X (c.i), the proposed gen-tie line would cross over the Dominguez Channel but would be left in its existing condition and avoided during both construction and operation of the proposed project and project-related offsite improvements. Therefore, the proposed project and project-related offsite improvements would not result in the alteration of any stream or river course. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the project site is mapped within Zone "X," indicating an area of reduced flood risk due to levee (FEMA 2023). The proposed project would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which help prevent flood damage resulting from hydromodification by limiting surface runoff. In addition, the proposed project would adhere to all standards and requirements identified in CMC Chapter 8 and the project-specific SWPPP, which would require implementation of measures to reduce the potential for flooding on- or off-site. The proposed project would also be subject to LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. Thus, adherence with these measures would ensure that impacts are less than significant.

d) As discussed above, the project site and project-related offsite improvements are mapped within Zone "X," indicating an area of reduced flood risk due to levee (FEMA 2023). The proposed project would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which help prevent flood damage resulting from hydromodification by limiting surface runoff. In addition, the

proposed project would adhere to all standards and requirements identified in the CMC Chapter 8 and project-specific SWPPP, which would require implementation of measures that reduce the potential for flood hazards. The proposed project would also be subject to LBMC Chapter 18.74, Low Impact Development Standards, and LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control.

Due to the distance of the City to the Pacific Ocean, Carson has not been vulnerable to storm surge inundation (City of Carson 2023). Based on tsunami inundation maps prepared by CGS, the project site and project-related offsite improvements are not located in a tsunami inundation hazard area and thus, the potential for tsunami effects is considered negligible (CGS 2021). Furthermore, the absence of any large bodies of water within Carson preclude the possibility of damage from seiche effects on the project site (City of Carson 2023). Given the lack of flood hazard, tsunami, or seiche risk in the project area, no impacts would be anticipated.

e) There are no applicable water quality control plan or sustainable groundwater management plans for the project site. As stated above, the project site and project-related offsite improvements are located partially within an urbanized area currently developed with an aggregate recycling center and partially within an open space area. The project site has been previously developed and does not serve as a source of groundwater. Therefore, the proposed project and project-related offsite improvements would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan and no impacts would be anticipated.

XI. Land Use and Planning

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
LAND USE AND PLANNING— Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion

a) The project site and project-related offsite improvements are located partially within an urbanized area and partially within an open space area. The project site and project-related offsite improvements are currently developed as an aggregate recycling center, open space, and the existing SCE Hinson Substation. Development of the proposed project and project-related offsite improvements would not physically divide an established community as the proposed project would develop one parcel surrounded by urbanized uses with uses similar to those in the surrounding area. Thus, the proposed project and project-related offsite improvements would not divide an established community and no impacts would occur.

b) According to the City of Carson General Plan, the project site has a General Plan land use designation of Heavy Industrial and a zoning code designation of Manufacturing Heavy – with Site Plan and Design Review Overlay (MH-D).

Table 11, General Plan Consistency Analysis, analyzes the proposed project's and project-related offsite improvement's consistency with relevant City of Carson General Plan Land Use Element goals and policies; City of Long Beach General Plan Air Quality Element, Land Use Element, and Urban Design Element goals and policies; and City of Los Angeles General Plan Safety Element goals and policies. As demonstrated in Table 11, the proposed project and project-related offsite improvements are consistent with the City of Carson's General Plan Land Use Element; City of Long Beach's General Plan Air Quality, Land Use, and Urban Design Elements; and the City of Los Angeles' General Plan Safety Element.

The City of Carson uses the specific plan process to establish type, location, and character of development to take place on a property (City of Carson 2023). Although a specific plan allows flexibility of development in regard to land use and design concepts, the overall design guidelines are required to follow City of Carson standards. The proposed project would be designed to be compatible with zoning and design regulations as detailed in the specific plan and would adhere to allowable building height and setbacks.

TABLE 11
GENERAL PLAN CONSISTENCY ANALYSIS

Relevant Policies	Project Consistency Analysis
City of Carson's General Plan Land Use Element	
Goal LU-6: A sustainable balance of residential and non-residential development and a balance of traffic circulation throughout the City.	The proposed project would be developed on a site that was previously developed with industrial uses. The proposed use includes a BESS facility which would be in keeping with the previous uses on the project site as well as the surrounding existing industrial uses along Alameda Street. As such, development of the proposed project would not conflict with this goal.
Goal LU-7: Adjacent land uses that are compatible with one another.	The proposed project would be developed on a site that was previously developed with industrial uses. The proposed use includes a BESS facility which would be in keeping with the previous uses on the project site as well as the surrounding existing industrial uses along Alameda Street. As such, development of the proposed project would not conflict with this goal.
Goal SAF-4: Minimize the threat to the public health and safety and to the environment posed by a release of hazardous materials.	As discussed in Section IX (b), compliance with applicable federal, State, and local standards would ensure that no potentially significant impacts related to an accidental release of hazardous materials during construction would occur. During operation, the proposed BESS components would be enclosed (lithium-ion (or similar technology available at the time of construction) batteries would be fully contained within the storage containers, and battery fluids or substances would not be susceptible to spills or release as runoff). Appropriate spill containment and cleanup kits would be maintained during operation of the proposed project. In addition to the HMBP that would be prepared for the proposed project, an SPCC plan and material disposal and solid waste management plan would also be developed for site operations. Additionally, the proposed project would be required to comply with federal, State, and local requirements, further minimizing the potential for an accidental release of hazardous materials. As such, development of the proposed project would not conflict with this goal.
Policy SAF-4.1: Strictly enforce federal, state and local laws and regulations relating to the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials to prevent unauthorized discharges.	As discussed in Section IX (a), compliance with the recommendations provided in the Phase I ESA, adherence to the HMBP, and implementation of BMPs, would ensure impacts related to the routine transport, use, or disposal of hazardous materials during construction of the proposed project, would be less than significant. Appropriate spill containment and cleanup kits would be maintained during operation of the proposed project. In addition to the HMBP that would be prepared for the proposed project, a SPCC plan and material disposal and solid waste management plan would also be developed for site operations. In addition, compliance with federal, State and local requirements would serve to minimize health and safety risks to people or structures associated with hazardous materials stored or used for proposed project operations. As such, development of the proposed project would not conflict with this policy.

Relevant Policies	Project Consistency Analysis
Goal SAF-5: Minimize the public hazard from fire emergencies.	As described in Chapter 2, *Project Description*, the proposed battery packs would be NFPA 855 Code compliant, UL Certified, and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules in the event of an emergency. In addition, LACFD would review and approve the facility fire protection and suppression plans prior to approval of the proposed project, which would cover all applicable design, construction, and testing requirements of the NFPA 855 Code. As such, development of the proposed project would not conflict with this goal.
City of Long Beach's Air Quality Element	
Goal 7: Reduce emissions through reduced energy consumption.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would assist the State in meeting its GHG emissions reduction goals by 2020 and 2030. The proposed project and project-related offsite improvements would assist with switching away from fossil-fueled generation by allowing renewables to be stored and discharged back to the market when necessary. As such, development of the proposed project and project-related offsite improvements would not conflict with this goal.
Policy 7.1 Energy Conservation. Reduce energy consumption through conservation improvements and requirements.	The proposed project and project-related offsite improvements would assist with reducing fossil-fueled energy produced by allowing renewable energy to be stored and discharged back to the market when necessary. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.
City of Long Beach's Land Use Element	
Goal 1: Implement sustainable planning and development practices.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would reliably capture and manage renewable energy in an economically feasible and commercially financeable manner. The proposed project and project-related offsite improvements would assist with reducing fossil-fueled energy produced by allowing renewable energy to be stored and discharged back to the market when necessary. As such, development of the proposed project and project-related offsite improvements would not conflict with this goal.
Policy LU 2-1: Promote the establishment of local green energy generation projects along with the infrastructure to support such projects.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would utilize energy storage technology that is efficient, low- maintenance, and is recyclable. The proposed project would include a collector substation as well as a gen-tie line to interconnect the proposed project to the SCE Hinson Substation. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.
Policy LU 3-1: Implement land use regulations and economic development strategies that will help diversify the local economy and expand job growth. Accommodate a mix of industries in Long Beach, including high technology, telecommunications, aerospace, green technology, renewable energy, healthcare, higher education, manufacturing, port and shipping, professional services, restaurants, entertainment and the film industry.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would reliably capture and manage renewable energy in an economically feasible and commercially financeable manner. The proposed project and project-related offsite improvements would provide economic benefit to the City, the region, and the State, through construction jobs, property and sales taxes, construction and maintenance services, and increased energy efficiency and reliability. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.
Policy LU 4-2: Promote the transition of some heavy industrial and manufacturing sites to creative green and sustainable industries.	As discussed in section X (b), portions of the project site were previously developed with a hydrogen gas plant between the early 1960s to the late 1990s. The project site has since been redeveloped for use as an aggregate recycling center. The proposed project and project-related offsite improvements would further the transition of heavy industrial uses to renewable energy production by adding a green and sustainable use to the project site. As such,

Relevant Policies	Project Consistency Analysis
	development of the proposed project and project-related offsite improvements would not conflict with this policy.
City of Long Beach's Urban Design Element	
Policy UD 6-4: Promote sustainability through the use of new technologies and green infrastructure to upgrade city infrastructure systems and equipment. Prioritize areas to retrofit with green infrastructure, Low Impact Development, and Best Stormwater Management Practices.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would reliably capture and manage renewable energy in an economically feasible and commercially financeable manner. The project-related offsite improvements would provide economic benefit to the City, the region, and the State, through construction jobs, property and sales taxes, construction and maintenance services, and increased energy efficiency and reliability. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.
Policy UD 24-4: Utilize sites away from neighborhoods for more intense industrial uses.	The project site and project-related offsite improvements are not immediately adjacent to any residential uses. The nearest residences to the proposed project are located approximately 350 feet to the west along Pacific Drive. As such, development of the proposed project would not conflict with this policy.
City of Los Angeles' Safety Element	
Policy 1.1.4: Health/Environmental Protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.	As discussed in Section IX (b), compliance with applicable federal, State, and local standards would ensure that no potentially significant impacts related to an accidental release of hazardous materials during construction would occur. During operation, the proposed BESS components would be enclosed (lithium-ion (or similar technology available at the time of construction) batteries would be fully contained within the storage containers, and battery fluids or substances would not be susceptible to spills or release as runoff). Appropriate spill containment and cleanup kits would be maintained during operation of the proposed project and project-related offsite improvements. In addition to the HMBP that would be prepared for the proposed project and project-related offsite improvements, an SPCC plan and material disposal and solid waste management plan would also be developed for site operations. Additionally, the proposed project and project-related offsite improvements would be required to comply with federal, State, and local requirements, further minimizing the potential for an accidental release of hazardous materials. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.
Policy 1.2.2: Renewable Energy. Aggressively pursue renewable energy sources, transitioning away from fossil based sources of energy and toward 100% renewable energy sources.	The proposed project and project-related offsite improvements includes the development of a BESS facility that would reliably capture and manage renewable energy in an economically feasible and commercially financeable manner. The proposed project and project-related offsite improvements would assist with reducing fossil-fueled energy by allowing renewable energy to be stored and discharged back to the market when necessary. As such, development of the proposed project and project-related offsite improvements would not conflict with this policy.

SOURCE: ESA 2023

Based on the analysis above and upon approval of the requested entitlements, the proposed project and project-related offsite improvements would not conflict with applicable goals and policies in the Cities' General Plans or applicable regulations under the Zoning Code. Therefore, the proposed project and project-related offsite improvements would result in less-than-significant impacts.

XII. Mineral Resources

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
MINERAL RESOURCES— Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion

a) The project site is located in an urbanized area, on one developed parcel with surrounding mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. According to the Los Angeles County Conservation and Natural Resources Element and the California Department of Conservation (CDC), the project site and project-related offsite improvements are not in Mineral Resource Zone 2 (MRZ-2), as identified in Figure 9.6, Mineral Resources (County of Los Angeles 2015), and the CDC Mineral Lands Classification Map (CDC 2022). MRZ-2 zones are characterized as areas that are underlain by significant measured or indicated mineral resources. Additionally, according to the City of Carson General Plan Open Space and Environmental Conservation Element, the City does not contain any known mineral resources (City of Carson 2023). No mineral extraction or other mining operations have historically or currently occur within the project site and project-related offsite improvements, nor would the proposed project and project-related offsite improvements result in the loss of availability of any known mineral resource. Therefore, no impact to a known mineral resource would occur.

b) No mineral extraction or other mining operations have historically or currently occurred within the project site and project-related offsite improvements, nor would the proposed project and project-related offsite improvements result in the loss of availability of any locally important mineral resource. In addition, the project site and project-related offsite improvements are not identified as an area that contains known mineral resources (City of Carson 2023, Long Beach 1973). Therefore, no impacts would occur to locally important mineral resources.

XIII. Noise

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
NOISE— Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Discussion

a) Noise is defined as unwanted sound; however, not all unwanted sound rises to the level of a potentially significant noise impact. To differentiate unwanted sound from potentially significant noise impacts, the City of Carson has established noise regulations that take into account noise-sensitive land uses. The following analysis evaluates potential noise impacts at nearby noise-sensitive land uses that may result from construction and operation of the proposed project and project-related offsite improvements.

Noise Principles and Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound (Caltrans 2013a, Section 2.2.1).

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale (i.e., not linear) that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of feeling and pain, respectively. In a non-controlled environment, a change in sound level of 3 dB is considered "just perceptible," a change in sound level of 5 dB is considered "clearly noticeable," and a change in 10 dB is perceived as a doubling of sound

volume (Caltrans 2013a, Section 2.1.3). Pressure waves traveling through air exert a force registered by the human ear as sound (Caltrans 2013a, Section 2.1.3).

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements (Caltrans 2013a, Section 2.1.3).

An individual's noise exposure is a measure of noise over a period of time, whereas a noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual. These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts (Caltrans 2013a, Section 2.2.2.1).

The time-varying characteristic of environmental noise over specified periods of time is described using statistical noise descriptors in terms of a single numerical value, expressed as dBA. The most frequently used noise descriptors are summarized below (Caltrans 2013a, Section 2.2.2.2):

L_{eq}: The L_{eq}, or equivalent continuous sound level, is used to describe the noise level over a specified period of time, typically 1-hour, i.e., $L_{eq(1)}$, expressed as L_{eq}. The L_{eq} may also be referred to as the "average" sound level.

L_{max}: The maximum, instantaneous noise level.

L_{min}: The minimum, instantaneous noise level.

L_X: The noise level exceeded for specified percentage (x) over a specified time period; i.e., L_{50} and L_{90} represent the noise levels that are exceeded 50 and 90 percent of the time specified, respectively.

L_{dn}: The L_{dn} is the average noise level over a 24-hour day, including an addition of 10 dBA to the measured hourly noise levels between the hours of 10 p.m. to 7 a.m. to account for nighttime noise sensitivity. L_{dn} is also termed the day-night average noise level or DNL.

CNEL: Community Noise Equivalent Level (CNEL) is the average noise level over a 24-hour day that includes an addition of 5 dBA to the measured hourly noise levels between the evening hours of 7 p.m. to 10 p.m. and an addition of 10 dBA to the measured hourly noise levels between the nighttime hours of 10 p.m. to 7 a.m. to account for noise sensitivity during the evening and nighttime hours, respectively. CNEL and L_{dn} noise levels typically differ by less than 1 dBA and are generally interchangeable.

City of Long Beach Municipal Code

The City of Long Beach has adopted a quantitative Noise Control Ordinance ("noise ordinance", LBMC Chapter 8.80), which sets forth all noise regulations controlling unnecessary, excessive, and annoying noise and vibration in Long Beach. As outlined in Section 8.80.150 of the LBMC, maximum exterior noise levels are based on land use districts. The Long Beach Noise Control Ordinance also governs the time of day that construction work can be conducted. Section 8.80.202 of the noise ordinance prohibits construction, drilling, repair, alteration, or demolition work between the hours of 7 p.m. and 7 a.m. on weekdays, between the hours of 7 p.m. on Friday and 9 a.m. on Saturday, and after 6 p.m. on Saturday, or at any time on Sundays or federal holidays unless allowed by the Long Beach Noise Control Officer (City of Long Beach 2023). **Table 12, City of Long Beach Exterior Noise Limits**, summarizes the exterior sound level criteria from LBMC Section 8.80.160.

TABLE 12
CITY OF LONG BEACH EXTERIOR NOISE LIMITS

Receiving Land Use District	Time Period	Noise Level (dBA, Leq)
District One	Night: 10 p.m. – 7 a.m.	45
	Day: 7 a.m. – 10 p.m.	50
District Two	Night: 10 p.m. – 7 a.m.	55
	Day: 7 a.m. – 10 p.m.	60
District Three	Anytime	65
District Four	Anytime	70
District Five	Regulated by other agencies and laws	N/A

NOTES:
District One: Predominantly residential with other land use types present
District Two: Predominantly commercial with other land use types also present
Districts Three and Four: Predominantly industrial with other land use types also present
District Five: Airport, freeways and waterways regulated by other agencies
Districts Three and Four limits are intended primarily for use at their boundaries rather than for noise control within those districts.
SOURCE: City of Long Beach Municipal Code, 1977

City of Long Beach Noise Element

The City of Long Beach Noise Element considers the impacts from producers of stationary noise with standards as shown in **Table 13, City of Long Beach Allowable Noise Exposure from Transportation Sources**, City of Long Beach General Plan Draft

Noise Element Allowable Noise Exposure from Transportation Sources (as reproduced from Table N-5 in the Draft Noise Element [2019]).

TABLE 13
CITY OF LONG BEACH ALLOWABLE NOISE EXPOSURE FROM TRANSPORTATION SOURCES

Land Use		**L_{dn} (dBA)**	
Place Type	**Uses**	**Interior[1,2]**	**Exterior[3]**
Open Space Open Space (OS)	Playgrounds, neighborhood parks	N/A	70
	Golf Courses, riding stables, water recreation, cemeteries	N/A	N/A
Neighborhoods Founding and Contemporary Neighborhood (N) Multi-Family Residential-Low (MRF-L) Multi-Family Residential-Moderate (MRF-M)	Single-family, duplex and multiple-family	45	65
	Mobile home park	N/A	65
Mixed Use Neighborhood-serving Center or Corridor-Low (NC-L) Neighborhood-serving Center or Corridor-Low (NC-M) Transit-Oriented Development-Low (TOD-L) Transit-Oriented Development-Moderate (TOD-M)	Single-family	45	65
	Mobile home park	N/A	65
	Multiple-family, mixed use	45	65[4]
	Transient lodging-motels, hotels	45	65
	Sports arenas, outdoor spectator sports	N/A	N/A
	Auditoriums, concert halls, amphitheaters	45	N/A
	Office buildings, business, commercial and professional	50	N/A
Employment Community Commercial (CC) Industrial (I) Neo-Industrial (NI)	Manufacturing, utilities, agriculture	N/A	N/A
	Office buildings, business, commercial and professional	50	N/A
Unique Regional Serving Facility (RSF) Downtown (DT) Waterfront (WF)	Schools, nursing homes, day care facilities, hospitals, convalescent facilities, dormitories	45	65
	Government Facilities – offices, fire stations, community buildings	45	N/A
	Places of Worship, churches	45	N/A
	Libraries	45	N/A
	Multiple-family, mixed-use	45	65[4]
	Utilities	N/A	N/A
	Cemeteries	N/A	N/A

NOTES:

1. Interior habitable environment excludes bathrooms, closets, and corridors.
2. Interior noise standards shall be satisfied with windows in the closed position. Mechanical ventilation shall be provided per Uniform Building Code requirements.
3. Exterior noise level standard to be applied at outdoor activity areas (e.g., private yards, private patio, or balcony of a multifamily residence). Where the location of an outdoor activity area is unknown or not applicable, the noise standard shall be applied inside the property line of the receiving land use.
4. Within the NC-M, TOD-L, TOD-M, DT and WF PlaceType designations, exterior space standards apply only to common outdoor recreational areas. Ldn = Day-Night Average Level dBA = A-weighted decibels N/A = Not Applicable

SOURCE: City of Long Beach General Plan Update Draft Noise Element, 2019

With respect to construction noise, the City of Long Beach General Plan Update Draft Noise Element has the following policies under Strategy No. 12:

- Policy N 12-1: Reduce construction, maintenance, and nuisance noise at the source, when possible, to reduce noise conflicts.
- Policy N 12-2: Continue to limit the allowable hours for construction activities and maintenance operations near sensitive uses.
- Policy N 12-3: As part of the City's Municipal Code, establish noise levels standards based on PlaceType and time of day, to which construction noise shall conform.
- Policy N 12-4: Encourage off-site fabrication to reduce needed onsite construction activities and corresponding noise levels and duration.
- Policy N 12-5: Require that all construction activities incorporate best business practices, such as:
  - Schedule high-noise and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.
  - Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.
  - Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible.
  - The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.
  - The construction contractor should use on-site electrical sources to power equipment rather than diesel generators, where feasible.
  - All residential units located within 500 ft of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 ft should also be posted at the construction site. All notices and the signs should indicate the dates and durations of construction activities, as well as provide a telephone number for a "noise disturbance coordinator."
  - A "noise disturbance coordinator" should be established by the project developer. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.
- Policy N 12-6: Continue to provide information bulletins dispersing information on municipal code requirements and recommended best practices.
- Policy N 12-7: Work together with the AQMD to encourage the retirement of older construction equipment in favor of newer, quieter, and less polluting equipment.

City of Carson Municipal Code

CMC Article 5, Chapter 5, details the City's approach to noise control and standards. CMC Section 5500 states the City's intent to adopt the Los Angeles County Municipal Code (LACMC) Noise Control Ordinance (Title 12, Chapter 12.08) as the CMC's own noise control ordinance with some key amendments. LACMC Section 12.08.390(B) sets standards for acceptable exterior noise levels. The standards are intended to protect the community from excessive noise levels that have the potential to: (i) interfere with sleep, communication, relaxation, and enjoyment of property; (ii) contribute to hearing impairment; and (iii) adversely affect the value of property. The standards for exterior noise levels are summarized in **Table 14, City of Carson Exterior Noise Level Standards**. Noise measurement calculations are provided in **Appendix H** of this IS/MND.

TABLE 14
CITY OF CARSON EXTERIOR NOISE LEVEL STANDARDS

Zone	Time Interval	Hourly Equivalent Sound Level (dBA, L_{eq})
I. Noise Sensitive Area	Anytime	45 dBA
II. Residential Properties (nighttime)	10 p.m. to 7 a.m.	45 dBA
Residential Properties (daytime)	7 a.m. to 10 p.m.	50 dBA
III. Commercial Properties (nighttime)	10 p.m. to 7 a.m.	55 dBA
Commercial Properties (daytime)	7 a.m. to 10 p.m.	60 dBA
IV. Industrial Properties	Anytime	70 dBA

SOURCE: LACMC Section 12.08.390

CMC Article 5, Chapter 5, Section 5502, provides a list of amendments added to the LACMC for application in the City of Carson. Section 5502 amends CMC Chapter 12.08, Part 4, to address noise standards for construction activities with nearby residential land uses. Long-term construction (defined as more than 21 days of scheduled work) is permitted Monday through Saturday from 7 a.m. to 8 p.m. given construction does not exceed 65 dBA in single-family residential areas, 70 dBA in multi-family residential areas, and 70 dBA in semi-residential/commercial areas. Construction noise levels take precedence over the noise standards listed in Table 14, above. Section 5502(h) lists amendments to the LACMC for procedures for obtaining a variance from the requirements of CMC Article 5, Chapter 5, which may be granted by the Planning Commission for a period not to exceed 2 years, subject to such terms, conditions and requirements as may be reasonable under the circumstances.

City of Carson General Plan Noise Element

In addition to the previously described CMC provisions, the City has also established noise guidelines in the Noise Element of the City's General Plan that are used for planning purposes (City of Carson 2023). These guidelines are based in part on the community noise compatibility guidelines established by the California State Governor's Office of Planning and Research and are intended for use in assessing the compatibility of various land use types with a range of noise levels (Office of Planning and Research 2017).

Table 15, City of Carson Guidelines for Noise Compatible Land Use, provides the guidelines of land use compatibility for community noise sources. The CNEL noise levels

TABLE 15
CITY OF CARSON GUIDELINES FOR NOISE COMPATIBLE LAND USE

	Community Noise Exposure (CNEL, dB)			
Land Use Categories	**Normally Acceptable**	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Residential – Low Density	50–60	60–65	65–75	75–85
Residential Multi-Family	50–60	60–65	65–75	75–85
Transient Lodging, Hotel, Motel	50–65	65–70	70–80	80–85
School, Library, Church, Hospital, Nursing Home	50–60	60–65	65–80	80–85
Auditorium, Concert Hall, Amphitheater	N/A	50–65	N/A	65–85
Sports Arena, Outdoor Spectator Sports	N/A	50–70	N/A	70–85
Playground, Neighborhood Park	50–70	N/A	70–75	75–85
Golf Course, Riding Stable, Water Recreation, Cemetery	50–70	N/A	70–80	80–85
Office Building, Business, Commercial, Professional	50–67.5	67.5–75	75–85	N/A
Agriculture, Industrial, Manufacturing, Utilities	50–70	70–75	75–85	N/A

NOTES:

Based on the Governor's Office of Planning and Research, "General Plan Guidelines" 1990. To help guide determination of appropriate land use and mitigation measures vis-a-vis existing or anticipated ambient noise levels.

A = Normally Acceptable: Specified land use is satisfactory, based upon the assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally Acceptable: New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will suffice.

N = Normally Unacceptable: New construction or development generally should be discouraged. A detailed analysis of the noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: City of Carson 2002

for specific land uses are classified into four categories: (1) "normally acceptable"; (2) "conditionally acceptable"; (3) "normally unacceptable"; and (4) "clearly unacceptable." A CNEL value of 65 dBA is considered the dividing line between a "conditionally acceptable" and "normally unacceptable" noise environment for noise sensitive land uses, including residences, and schools. A CNEL value of 70 dBA is considered the dividing line between a "normally acceptable" and "normally unacceptable" noise environment for noise sensitive land uses, including neighborhood parks.

Thresholds of Significance

The City of Carson's noise ordinances regulate construction and operational noise. With respect to the community noise assessment, changes in noise levels of less than 3 dBA are generally not discernable to most people, while changes greater than 5 dBA are readily noticeable and would be considered a significant increase. Therefore, the significance threshold for mobile source noise is based on human perceptibility to changes in noise levels (increases) with consideration of existing ambient noise

conditions and City's land use noise compatibility guidelines. Therefore, the proposed project and project-related offsite improvements would result in a significant noise impact if:

- For sensitive receptors located in the City of Carson, project construction activities would generate noise levels in one of the following two conditions: (a) in single-family residential areas that exceed a maximum of 65 dBA for single-family residential uses or a maximum of 70 dBA for multi-family residential, semi-residential, or commercial uses between the hours of 7 a.m. and 8 p.m., Monday through Saturday;
- Project on-site stationary sources (i.e., air conditioning units, pumps) increase existing ambient noise levels at adjacent sensitive receptors by 5 dBA or more if the existing noise levels do not already exceed the City's exterior noise standards, or by 3 dBA or more if the existing noise levels already exceed the City's exterior noise standards or if the resulting noise levels would result in the exceedance of the City's exterior noise standards.
- Project-related off-site traffic increases ambient noise levels by 5 dBA CNEL or more along roadway segments with sensitive receptors, and the resulting noise level occurs on a noise-sensitive land use within an area categorized as "normally acceptable;" or causes ambient noise levels to increase by 3 dBA CNEL or more and the resulting noise occurs on a noise-sensitive land use within an area categorized as "conditionally acceptable," "normally unacceptable," or "clearly unacceptable."

Existing Conditions

The proposed project and project-related offsite improvements are located in an area surrounded by a mix of industrial land uses. Current uses adjoining the project site include an oil refinery to the north, the Dominguez Channel to the east followed by residential uses, and a coke (petroleum) storage facility to the south. Additionally, an approximately 15-foot wall is located east of the proposed gen-tie location along the residential uses. Alameda Street borders the project site to the west, with the UPRR and the former ARCO refinery, now known as the Marathon Los Angeles Refinery, beyond. The project site is zoned MH-D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) with a General Plan Land Use designation of Heavy Industrial.

Noise Sensitive Receptors

The project site is located at 23320 Alameda Street on the east side of Alameda Street south of I-405 and west of the Dominguez Channel. The project site and project-related offsite improvements are surrounded by industrial uses that are not considered noise sensitive. However, the gen-tie line connecting the proposed BESS to the existing SCE Hinson Substation runs parallel to residential land uses that are considered noise sensitive. The following are the sensitive land uses closest to the project site, proposed gen-tie route, and upgrades to the existing SCE Hinson Substation:

- **R1** – Residential land uses approximately 2,650 feet west of the project area, 350 feet to the west of the gen-tie line, and 500 feet to the north of the SCE Hinson Substation connection point.

Construction Noise

Construction of the proposed project and project-related offsite improvements are expected to commence in third quarter of 2024 and would last through first quarter of 2026. The proposed project and project-related offsite improvements consists of construction activities associated with the proposed BESS, proposed gen-tie route, and upgrades to the existing SCE Hinson Substation see Table 2 in section III. Air Quality, for details.

On-Site Construction Activities

Noise from construction activities would be generated by the operation of vehicles and equipment involved during various stages of construction: site preparation, building construction, etc. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. To more accurately characterize construction-period noise levels, the average (Hourly L_{eq}) noise level associated with each construction phase is estimated based on the quantity, type, and usage factors for each type of equipment used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

Consistent with LACMC Section 12.08.440 (which was adopted by reference by the City of Carson), the construction noise levels were estimated at the property line of the closest sensitive receptor location. As previously stated, the project site is surrounded by a mix of industrial uses. The closest sensitive receptors to the project site are the residential uses to the east located approximately 350 feet from the gen-tie location. A 15-foot sound wall is located along the western portion of the residential land uses and would provide up to a 20 dBA reduction in construction noise levels. It is conservatively assumed that multiple equipment would operate simultaneously. In reality, equipment would likely be dispersed throughout the project site; therefore, the noise levels represent a conservative maximum and actual noise levels could be lower. Further, the closest sensitive receptors in each affected area were analyzed and it is assumed that sensitive receptors located at further distances would experience lower noise levels than those disclosed below. Generally, noise attenuates at a rate of 6 dBA for every doubling of distance from the noise source.[6] **Table 16, Construction Equipment and Estimated Noise Levels**, presents the list of construction equipment including approximate quantities per construction phase with reference noise levels.

6 Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" sites for each doubling of distance from the reference measurement, Caltrans, Technical Noise Supplement, September 2013.

TABLE 16
CONSTRUCTION EQUIPMENT AND ESTIMATED NOISE LEVELS

Construction Phase and Equipment	Noise Level L_{max} at 50 feet (dBA)	Hourly Quantity	Estimated Hourly Noise Level L_{eq} at Residences (dBA) [1]
SCE Upgrades/Interconnection			
Civil Construction	86	1	40
Electrical Construction	83	1	37
Electrical Construction	86	1	40
Electrical Construction	84	1	37
FO Cable Construction	80	1	37
FO Cable Construction	83	1	36
BESS			
Site Preparation	87	1	48
Collector Substation Site Preparation	85	1	47
BESS Grading	88	1	48
Collector Substation Grading	87	1	44
Battery/Container Installation & Collector Substation Construction/Installation	93	1	51
Gen-Tie Trenching	86	1	44
Gen-Tie Duct Bank and Vault Installation	87	1	46
Gen-Tie Jack-and-Bore	85	1	46
Gen-Tie Road Resurface and Clean Up	85	1	46
Decommissioning	89	1	50
Overlapping Phases			
Site Preparation & Collector Substation Site Preparation & BESS Grading & Collector Substation Grading			53.4
Collector and Battery Installation & Gen-Tie Trenching & Gen-Tie Duct Bank Vault Installation			52.8
Collector and Battery Installation & Gen-Tie Jack-and-Bore			52.0
Maximum Combined Noise Levels	**—**	**—**	**53.4**
Significant Threshold			**65**
Significant Impact?			**No**

NOTES:

Noise Levels at 50 feet and Usage Factor are derived from Federal Highway Administration's Roadway Construction Noise Model User's Guide. Usage factors are the ratio of the time that a piece of equipment is in use to the total time that it could be in use. Usage factors are typically attributable to multiple pieces of equipment operating simultaneously.

1. An existing 15 foot wall is located east of the proposed gen-tie location along the residential uses and provides a 20 dBA reduction in noise.

SOURCE: ESA 2023

The estimated noise levels, shown in Table 16, assumes the project contractor(s) would equip the construction equipment, stationary or mobile, with properly operating and maintained noise mufflers, consistent with the manufacturers' standard operation procedures. These assumptions represent a worst-case noise scenario as all construction equipment used in a given phase would not typically operate concurrently and at full power, and the location of activities is routinely spread across the construction site, rather than concentrated close to the nearest noise-sensitive receptors.

As shown in Table 16, estimated construction noise levels at the off-site receptors in the vicinity of the project site range from 37 to 53.4 dBA L_{eq}. CMC Section 12.08, Part 4, limits construction noise levels to 65 dBA L_{eq} for semi-residential receptors between the hours of 7 a.m. and 8 p.m. Similarly, LBMC Section 8.80.202 of the noise ordinance prohibits construction, drilling, repair, alteration, or demolition work between the hours of 7 p.m. and 7 a.m. on weekdays, between the hours of 7 p.m. on Friday and 9 a.m. on Saturday, and after 6 p.m. on Saturday, or at any time on Sundays or federal holidays unless allowed by the Long Beach Noise Control Officer (City of Long Beach 2020). Construction noise levels per phase would not exceed 65 dBA L_{eq} at the nearest sensitive source and impacts would be less than significant.

As stated earlier, CMC Article 5, Chapter 5, Section 5502, provides a list of amendments added to the LACMC for application in the City of Carson. Section 5502(c) amends CMC Chapter 12.08, Part 4, to address noise standards for construction activities with nearby residential land uses. Long-term construction (defined as more than 21 days of scheduled work) is permitted Monday through Saturday from 7 a.m. to 8 p.m. given construction does not exceed 65 dBA in single-family residential areas, 70 dBA in multi-family residential areas, and 70 dBA in semi-residential/commercial areas.

The proposed project and project-related offsite improvements would comply with LACMC Section 12.08.440 and CMC Section 7-12.22; the proposed project's construction activities, including delivery and haul routes, would be prohibited between the hours of 7 p.m. and 7 a.m. Monday through Saturday or any time on Sundays or holidays.

Therefore, with respect to a violation of the noise standards and regulations established in the CMC, noise impacts during construction of the proposed project and project-related offsite improvements would be less than significant. No mitigation is required.

Off-Site Construction Activities

During all phases of construction, haul and vendor truck trips would be required to bring construction materials and building debris to and from the project site. The temporary addition of the number of trips required per day during construction activities would not result in a doubling of trips along access roads leading to the project site. Therefore, the increase in noise level would be substantially less than the threshold of a 5 dBA increase in an area characterized by normally acceptable and conditionally acceptable noise levels or a 3 dBA increase in an area characterized by conditionally unacceptable or normally

unacceptable noise levels. In order to increase traffic noise levels by 3 dBA, the traffic volumes with the proposed project and project-related offsite improvements would need to double from the "Existing" to the "with Project" conditions. The proposed project and project-related offsite improvements would not cause traffic volumes to double as a result of implementation and operation. Additionally, the off-site haul truck activities are temporary in nature and would only take place for 18 months after which the proposed project and project-related offsite improvements would cease to have any significant lasting noise impact on the surrounding areas. Therefore, off-site construction traffic noise impacts would be less than significant and no mitigation measures would be required.

Operational Noise

The existing noise environment in the project vicinity is dominated by traffic noise from nearby roadways, as well as nearby commercial activities. Long-term operation of the proposed project and project-related offsite improvements would have a minimal effect on the noise environment in proximity to the project site and project-related offsite improvements. The proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic visits would be conducted for on-site equipment inspections, monitoring, and testing.

Off-Site Traffic Noise

As stated above, the proposed project and project-related offsite improvements would result in minimal trips to/from the project site and project-related offsite improvements for periodic maintenance and would not result in a doubling of trips along roadways in the project vicinity. Therefore, the increase in noise level would be substantially less than the threshold of a 5 dBA increase in an area characterized by normally acceptable and conditionally acceptable noise levels or a 3 dBA increase in an area characterized by conditionally unacceptable or normally unacceptable noise levels and impacts would be less than significant.

On-Site Operational Noise

Typical operation and maintenance activities that would occur on the project site during operation include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication protocols; and repair and maintenance of the proposed BESS, electrical transmission lines, and other proposed project facilities. The electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security would be automated and monitored remotely. The project site would be unoccupied but would be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance as needed. Batteries and various components would be replaced or renewed as necessary to ensure optimal performance.

Mechanical equipment and the BESS would be housed within on-site structures that would limit noise emission and would not generate considerable noise from operation. Further, the project site is located in an industrialized area that does not have any nearby sensitive receptors. Therefore, impacts from on-site operational noise would be less than significant.

b) The proposed project and project-related offsite improvements would be constructed using typical construction techniques. As such, it is anticipated that the equipment to be used during construction would not expose persons to or generate excessive groundborne vibration. Post-construction on-site activities would be limited to industrial uses that would not generate excessive groundborne vibration.

Vibration Principles and Descriptors

Groundborne vibration from development is primarily generated from the operation of construction equipment and from vehicle traffic. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. The vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Vibration levels for potential structural damage is described in terms of the peak particle velocity (PPV) measured in inches per second (in/sec).

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of industrial operation and construction activities such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. If traffic, typically heavy trucks, does induce perceptible building vibration, it is most likely an effect of low-frequency airborne noise or ground characteristics.

Building structural components also can be excited by high levels of low-frequency airborne noise (typically less than 100 Hz). The many structural components of a building, excited by low-frequency noise, can be coupled together to create complex vibrating systems. The low-frequency vibration of the structural components can cause smaller items such as ornaments, pictures, and shelves to rattle, which can cause annoyance to building occupants.

Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes. Groundborne vibration related to human annoyance is generally related to root mean square (rms) velocity levels and expressed as velocity in decibels (VdB).

Regulatory Framework

The City of Carson does not address vibration either in its respective municipal codes or in the Noise Element of the General Plan. With respect to groundborne vibration from construction activities, Caltrans has adopted guidelines/recommendations to limit groundborne vibration based on the age and/or condition of the structures that are located in close proximity to construction activity. With respect to residential and commercial structures, Caltrans' technical publication, titled Transportation- and Construction-Induced Vibration Guidance Manual, provides a vibration damage potential threshold criteria of 0.5 inches per second PPV for historic and older buildings, 1.0 inch-per-second PPV for newer residential structures, and 2.0 inches per second PPV for modern industrial/commercial buildings. In addition, the guidance also sets 0.035 PPV as the threshold for "distinctly perceptible" human response to steady state vibration (Caltrans 2013b).

According to the Federal Transit Administration, ground vibrations from construction activities very rarely reach the level that can damage structures. A possible exception is the case of old, fragile buildings of historical significance where special care must be taken to avoid damage. The construction activities that typically generate the most severe vibrations are blasting and impact pile driving, which would not be used for the proposed project and project-related offsite improvements. The proposed project and project-related offsite improvements would use construction equipment such as skid steer loaders and excavators, which would generate groundborne vibration during excavation and foundation activities. Based on the vibration data by the Federal Transit Administration, typical vibration velocities from the operation of a large bulldozer would be approximately 0.089 inches per second PPV at 25 feet from the source of activity, 0.031 inches per second PPV at 50 feet distance, and 0.011 inches per second PPV at 100 feet distance.

Construction Vibration

The nearest off-site single-family residential buildings are located approximately 350 feet to the east along N. Springdale Drive. At a distance of 50 feet, the maximum vibration level (using large bulldozer as an example, as shown above) would be reduced from the level measured at 25 feet and would be well below the Caltrans construction vibration structure damage criteria as the proposed project and project-related offsite improvements would not generate vibration levels at nearby buildings that would exceed the 0.5 inches per second PPV structural damage threshold or the 0.035 inches per second PPV "distinctly perceptible" human response threshold. Therefore, construction vibration impacts would be less than significant and mitigation measures are not required.

Operational Vibration

Once construction activities have been completed, there would be no substantial sources of vibration activities from the project site and project-related offsite improvements. The operations of the proposed project and project-related offsite improvements would include industrial-grade stationary mechanical and electrical equipment, such as batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector

substation, and other associated equipment to interconnect into the existing SCE Hinson Substation.

Groundborne vibration generated by each of the above-mentioned equipment and activities would generate approximately up to 0.0014 inches per second PPV at locations adjacent (within 50 feet) to the project site (ASHRAE 1999). The potential vibration levels from all proposed project operational sources at the closest existing building and human annoyance receptor locations would be less than the significance criteria for building damage and human annoyance of 0.5 inches per second PPV and 0.035 inches per second PPV, respectively as the closest sensitive receptors are approximately 50 feet away from the project site. As such, vibration impacts associated with operation of the proposed project and project-related offsite improvements would be less than significant, and no mitigation measures are required.

c) The project site and project-related offsite improvements is located approximately 4.5 miles from the Compton/Woodley Airport, 3.3 miles from Long Beach International Airport and Torrance/Zamperini Field. However, the project site is located outside of these airports' 65 dBA CNEL noise contour and outside of the airport influence area. Therefore, construction or operation of the proposed project and project-related offsite improvements would not expose people to excessive airport related noise levels and impacts would be less than significant.

XIV. Population and Housing

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
POPULATION AND HOUSING— Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) A project could induce population growth in an area directly or indirectly. For example, direct population growth can occur by introducing new businesses or residential areas and indirect growth by extending roads or other infrastructure. The project site is located in an urbanized area and is currently developed as an aggregate recycling center. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. Given this use, which are not residential in nature, the proposed project and project-related offsite improvements would not induce direct population growth.

During construction of the proposed BESS component, up to 75 individuals would be employed and the average daily workforce onsite is anticipated to be 50 individuals. However, additional jobs would not increase the population because construction employees are anticipated to be drawn from existing residents of the region, the population of which would be consistent with the population growth projections provided in the 2020–2045 RTP/SCS (SCAG 2020). Therefore, construction of the proposed project and project-related offsite improvements would have a less-than-significant impact on the inducement of unplanned population and employment growth.

The proposed project and project-related offsite improvements would serve the existing area population. Employment opportunities during operation of the proposed project and project-related offsite improvements are not anticipated to substantially increase the population or housing in the area, since the employees would likely already live in or near the existing urbanized project area or consist of regional commuters. The proposed electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security would be automated and monitored remotely. Periodic in-person inspections would occur as needed, as part of a security contract. The project site would not require any on-site employment but would be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance. Further, indirect growth from extension of roads and infrastructure would not be anticipated, as the proposed project and project-related offsite improvements would not add new roadways. Therefore, the

proposed project and project-related offsite improvements would not result in a substantial population increase during operation, and impacts would be less than significant.

b) The project site is located is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. No residential uses are located on the project site or project-related offsite improvements. Therefore, no impacts related to the displacement of substantial quantity of existing residences would occur.

XV. Public Services

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
PUBLIC SERVICES— Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

a.i) LACFD serves the City of Carson and responds from six fire stations located within the City. The closest station to the project site and project-related offsite improvements is LACFD Station 127, approximately 0.9 miles to the northwest located at 2049 E 223rd Street. LACFD would provide primary fire protection services to the project site and project-related offsite improvements. The City of Los Angeles Fire Department (LAFD) and Long Beach Fire Department (LBFD) would provide fire protection services to the project-related offsite improvements.

Construction

Construction of the proposed project and project-related offsite improvements could increase the potential for on-site fires from such sources as the operation of mechanical equipment, the use of flammable construction materials, or the careless disposal of cigarettes. However, implementation of "good housekeeping" procedures by the construction contractors and the work crews would minimize fire hazards associated with the construction of the proposed project and project-related offsite improvements. Such measures would be in effect during construction of the proposed project and project-related offsite improvements.

Construction activities could also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by partial lane closures during utility installations and construction staging. However, these impacts would be less than significant, as the Applicant would be required to implement a traffic management plan that would ensure that at least one lane remains open and emergency access is maintained during construction. In addition, any lane closures that would occur would require review and approval by the LACFD.

Implementation of a traffic management plan would minimize the effects of construction on vehicular traffic, including emergency vehicles, and assist in the orderly flow of vehicular circulation in the area of the proposed project and project-related offsite improvements.

In summary, construction of the proposed project and project-related offsite improvements would be temporary in nature and, thus, would not require additional fire protection and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios, response times, or other performance objectives of the LACFD, LAFD, and LBFD. Therefore, construction-related impacts to fire protection services would be less than significant.

Operation

The proposed project and project-related offsite improvements would develop a currently developed site with a BESS, proposed gen-tie route, and upgrades to the existing SCE Hinson Substation. The proposed project and project-related offsite improvements would primarily be served by the LACFD Station 127, approximately 0.9 miles to the northwest located at 2049 East 223rd Street in the City of Carson. The LAFD and LBFD would provide fire protection to the project-related offsite improvements. The proposed battery packs would be NFPA 855 Code compliant and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules in the event of an emergency. The LACFD would review and approve the facility fire protection and suppression plans prior to approval of the proposed project and project-related offsite improvements. Furthermore, as required by the California Health and Safety Code, the proposed project and project-related offsite improvements would be required to comply with all requirements pertaining to fire protection systems, such as the adequate provisions of fire extinguishers, emergency response notification systems, and fire flows. With adherence to California Health and Safety Code, LACFD, LAFD, and LBFD standards and regulations, the proposed project and project-related offsite improvements would install adequate fire protection systems and, thus, would not result in the need for new or physically altered governmental facilities, the construction of which could cause a significant environmental impact. Therefore, impacts to fire protection services would be less than significant.

a.ii) Police protection services for the project site and project-related offsite improvements are primarily provided by the Los Angeles County Sheriff (LASD)'s Carson Station jurisdiction. The project site and project-related offsite improvements are within the Carson Station's service area which is located approximately 2.3 miles northwest of the project site at 21356 S. Avalon Boulevard. The City of Long Beach Police Department (LBPD) and City of Los Angeles Police Department (LAPD) would provide police protection services to the project-related offsite improvements.

The energy storage facility would feature a contemporary 24-hour security system including video surveillance monitoring. Fencing would be installed around the perimeter of the project site and project-related offsite improvements to prevent access by the public. An access gate would be installed at the project site entrance along South Alameda Street with the rest of the site fully enclosed. The gate would remain locked at all times when maintenance workers are not present at the site. Limiting access to the project site and project-related offsite improvements would ensure the safety of the public and protect the equipment from potential theft and vandalism. Thus, implementation of the proposed project and project-related offsite improvements would not significantly increase demand for police protection services provided by the LASD, LBPD, or LAPD. In addition, the proposed project would be subject to site plan review by the City of Carson prior to approval of the proposed project to ensure that it meets City requirements in regard to safety (e.g., nighttime security lighting); thus, discouraging criminal activity and reducing demand for police protection services. As such, the proposed project would not require LASD, LBPD, or LAPD to expand or construct new stations to serve the project site and project-related offsite improvements and impacts would be less than significant.

a.iii) During construction, construction workers would be temporarily present on the project site and project-related offsite improvements. There would be a peak workforce of 75 workers; however, the average daily workforce is expected to be 50 construction, supervisory, support, and construction management personnel onsite during the up to 12-month construction period for the proposed project. These construction workers would likely come from an existing local and/or regional construction labor force and would not likely relocate their households as a consequence of working on the proposed project and project-related offsite improvements. Therefore, the short-term increased employment of construction workers on the project site and project-related offsite improvements would not result in a notable increase in the residential population of the area surrounding the proposed project and project-related offsite improvements. Furthermore, during proposed project operations, the project site and project-related offsite improvements would be unoccupied except for periodic in-person inspections, monitoring, and maintenance as needed. Accordingly, there would not be a corresponding demand or use of the local schools. Therefore, no impact would occur.

a.iv) The City of Carson contains approximately 599 acres of open space and parkland. This includes neighborhood and community parks, golf courses, a Blimp Port, as well as drainage courses and utility transmission corridors (City of Carson 2004). Further, 243 acres of recreational open space is provided by both California State University Dominguez Hills and public schools located in the city (City of Carson 2004). The City's standard for permanent public open space is 4 acres per 1,000 residents. The closest park to the proposed project is Silverado Park, located approximately 0.85 mile east of the project site and project-related offsite improvements at the corner of Santa Fe Avenue and West 31st Street. Project employees are not anticipated to make use of the Silverado Park or other nearby parks in the cities of Carson, Los Angeles, or Long Beach to an extent that would affect its performance. The proposed project would develop industrial

uses and project-related offsite improvements and once operational would be unoccupied except for periodic in-person inspections, monitoring, and maintenance as needed. The proposed project would not introduce inhabitants to the project area that would increase the need for parks or recreational facilities in the vicinity of the project site or project-related offsite improvements. Therefore, no impact would occur.

a.v) As discussed above, the proposed project and project-related offsite improvements would not introduce inhabitants to the project area and thus, would not require the expansion of library facilities in the vicinity of the project site. Therefore, no impact would occur.

XVI. Recreation

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a) As discussed above, the City of Carson contains approximately 599 acres of open space and parkland. This includes neighborhood and community parks, golf courses, a Blimp Port, as well as drainage courses and utility transmission corridors (City of Carson 2004). Further, 243 acres of recreational open space is provided by both California State University Dominguez Hills and public schools located in the city (City of Carson 2004). The City's standard for permanent public open space is 4 acres per 1,000 residents. The closest park to the proposed project is Silverado Park, located approximately 0.85 mile east of the project site and project-related offsite improvements at the corner of Santa Fe Avenue and West 31st Street. Project employees are not anticipated to make use of the Silverado Park to an extent that would affect its performance. The proposed project and project-related offsite improvements would develop industrial uses and once operational would be unoccupied except for periodic in-person inspections, monitoring, and maintenance as needed. The proposed project and project-related offsite improvements would not introduce inhabitants to the project area that would increase the use of existing neighborhood or regional parks or other recreational facilities in the vicinity of the project site and project-related offsite improvements. Therefore, no impact would occur.

b) The proposed project and project-related offsite improvements would not include the construction or expansion of recreational facilities. In addition, the proposed project and project-related offsite improvements would not introduce inhabitants to the project area and thus, would not require the construction or expansion of recreation facilities. Therefore, no impact would occur.

XVII. Transportation

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
TRANSPORTATION— Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Discussion

a) The project site is located is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. The project site is bordered by Alameda Street to the west, industrial uses to the north and south, and the Dominguez Channel to the east. Access to the project site would be provided by an existing driveway on Alameda Street between East Sepulveda Boulevard and East 223rd Street.

The project site is located adjacent to a variety of existing transportation facilities. I-405 provides the primary regional access to the project site; major arterials that would be used for local access to the project site include East Sepulveda Boulevard and East 223rd Street in the east/west direction and Alameda Street in the north/south direction. With respect to roadways, the Transportation and Infrastructure Element of the City of Carson General Plan mainly considers roadway classifications as defined in the Carson Master Plan of Streets (e.g., local streets, collector streets), designated truck facilities, and traffic operations standards based on the concept of level of service (LOS). The proposed project and project-related offsite improvements does not propose changing any roadway classifications or established truck routes. Furthermore, the LOS measure used to govern roadway operations in the General Plan is no longer used in CEQA to determine the significance of a transportation impact. CEQA Guidelines Section 15064.3(b), which was adopted in December 2018 by the California Natural Resources Agency, require lead agencies to evaluate transportation impacts based on VMT. Project consistency with CEQA Guidelines Section 15074.3(b) is discussed below under Section XVII (b).

No transit routes are located adjacent to the project site or project-related offsite improvements. The nearest transit route is Long Beach Transit Route 8, located approximately 0.8 mile northwest of the project site. As detailed in the City of Carson Master Plan of Bikeways and the Los Angeles Metropolitan Transportation Authority's

(Metro) Active Transportation Strategic Plan, there are a few bike lanes and bike routes planned near the project site, including a planned extension of the bike path along the eastern side of the Dominguez Channel, east of I-405 (City of Carson 2013; Metro 2016). There is an existing flood control easement that separates the Dominguez Channel from existing development where the bike path could be located.

An increase in traffic would occur during construction of the proposed project and project-related offsite improvements; however, this increase would be temporary and would cease upon conclusion of project construction. In addition, the 175-foot-tall gen-tie poles would not be constructed in the flood control easement and thus, would not impact the proposed Dominguez Channel bike path. Operation of the proposed project and project-related offsite improvements would include occasional maintenance and landscaping trips to and from the project site and project-related offsite improvements; however, there would be no full-time on-site employees during operation. The increase in both construction and operational traffic would be considered a less than significant impact. Implementation of the proposed project and project-related offsite improvements would not remove or impede access to existing bicycle facilities, sidewalks, or transit services adjacent to or near the project site or project-related offsite improvements, nor would it affect future planned bicycle facility improvements along other nearby roadways or the Dominguez Channel. The proposed project and project-related offsite improvements does not include changes to roadways or design features that would conflict with the performance or safety of alternative transportation facilities. Therefore, impacts related to program plans, ordinances, or policies addressing the circulation system would be less than significant.

b) As detailed in Section XVII (a), operation of the proposed project and project-related offsite improvements would include occasional maintenance and landscaping trips to and from the site but would not include any full-time on-site employees during operation. Therefore, the proposed project and project-related offsite improvements would not generate excessive VMT in the project vicinity or region and would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Project impacts related to VMT would be less than significant.

c) An impact would occur if the proposed project and project-related offsite improvements substantially increased hazards due to a design feature. A review of existing site conditions and nearby roadways determined that there are no existing hazardous design features, such as sharp curves, non-standard driveways, or dangerous intersections, on–site or within the vicinity of the project site or project-related offsite improvements. The proposed project and project-related offsite improvements would not introduce any such design hazards or include any uses that are incompatible with normal traffic operations. The proposed project would provide direct access to and from Alameda Street from the existing driveway along the proposed project's western boundary. The proposed project driveway approach would be stop-controlled (i.e., not signalized). Internal circulation on the project site would be provided by an access road that would include a lane in both directions. The design of the proposed project would be required to comply with all

applicable State and City regulations regarding minimum clearances. Furthermore, the proposed BESS component of the project would not involve changes in the alignment of Alameda Street and the proposed project would be consistent with existing industrial uses in the area. Therefore, the proposed project and project-related offsite improvements would not result in a traffic safety hazard due to any design features or incompatible uses. Impacts related to traffic hazards or incompatible uses would be less than significant.

d) A significant impact would occur if the design of the proposed project and project-related offsite improvements would not satisfy local emergency access requirements. As analyzed in Section IX, *Hazards and Hazardous Materials*, above, primary access to the project site would be provided from Alameda Street and would not result in any permanent alterations to vehicular circulation routes or obstruct public access along adjacent roadways that would result in inadequate emergency access. All construction staging would occur within the boundaries of the project site and project-related offsite improvements and would not interfere with circulation along the adjacent roadways, or any other nearby roadways. The City has prepared a Multi-Hazard Functional Plan (1996) for emergency response within the city. The plan identifies emergency protocol, critical meeting areas, and emergency evacuation routes. The four major freeways (I-405, SR-91, I-110, and I-710) as well as arterial streets with right-of-way widths from 80 to 100 feet at one-half mile intervals would serve as potential evacuation routes during a disaster. Potential evacuation routes that are located near the site include East Sepulveda Boulevard and Alameda Street. The project site and project-related offsite improvements are not located directly along an evacuation route and operations under the proposed project and project-related offsite improvements would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts related to emergency access would be less than significant.

XVIII. Tribal Cultural Resources

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
TRIBAL CULTURAL RESOURCES— Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

This section is based, in part, on the Avocet Energy Storage Project Cultural Resources Assessment Report, prepared by ESA, dated January 2024 (refer to **Appendix D** of this IS/MND).

Discussion

a.i, a.ii) **Less than Significant Impact with Mitigation Incorporated**. The tribal cultural resource analysis is based on a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC), a cultural resources records search through the South Central Coastal Information Center (SCCIC), a pedestrian survey of the project site and project-related offsite improvements, consultations between the City and Native American tribes pursuant to Assembly Bill (AB) 52, as well as the Cultural Resources Assessment Report prepared by ESA that is provided in **Appendix D** of this IS/MND. Native American consultation documentation related to AB 52 consultations is provided in **Appendix I** of this IS/MND.

As discussed above in Section V. (Cultural Resources) of this IS/MND, the pedestrian survey and SLF search yielded negative results. However, the records search through the SCCIC indicates that two archaeological resources were previously recorded in the vicinity of the project site and project-related offsite improvements. The first resource is CA-LAN-2682, also known as the Arco Burial Site, and is described as consisting of shell midden soils and over 500 shell beads, projectile points, bone awls, glass trade beads, steatite pipe fragments and other steatite objects, as well as multiple human burials. The second resource is P-19-187085/Mojave Road which is designated as California Historical Landmark No. 963. The resource has been described as an Indian trail, a federal government supply, a freight and emigrant wagon route, and a recreational trail. Additional archival research indicates that the Native American village of *Suangna*

is located within the City's boundaries and was originally part of the Rancho San Pedro land grant. A plaque commemorating the site of *Suangna* is located in the present-day Watson Industrial Park in Carson (ESA 2024).

As discussed above in Section V. (Cultural Resources) of this IS/MND, ESA implemented an archaeological test excavation program to determine whether resource CA-LAN-2682 extended onto the project site by excavating seven mechanical trenches and 16 Shovel Test Pits or Hand Auger Bores in the western portion of the project site. A Native American representative from the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation/Tribe) was present to monitor the archaeological test excavation effort. One possible fused shale flake artifact and several unmodified marine and estuarine shellfish specimens were recovered from many excavation units from the test excavation effort. However, these materials were found in heavily disturbed contexts intermixed with modern refuse items (e.g., red brick fragments, bottle glass fragments, concrete chunks, rusted nails). These materials were found in contexts that had been redeposited as fill for the project site; therefore, it is not possible to definitively classify them as prehistoric artifacts or ecofacts that may be associated with resource CA-LAN-2682/P-19-2682 or another prehistoric resource. No human remains or tribal cultural resources were recovered during the test excavation effort.

The City conducted consultation with Native American tribes pursuant to AB 52 to identify known tribal cultural resources within or near the project site and project-related offsite improvements (see **Appendix I** of this IS/MND). On August 4, 2023, the City sent project notification emails to the designated representatives of six California Native American tribes (eight contacts in total) (**Table 17, Summary of AB 52 Consultation**). The emails provided brief descriptions of the proposed project, a map, the lead agency's contact information, and a request for the tribes to respond within 30 days to request consultation pursuant to Public Resources Code section 21080.3.1.

One request for consultation was received to date. In a letter dated August 29, 2023, Chairman Andrew Salas of the Kizh Nation requested consultation. On October 13, 2023, representatives of the Kizh Nation consulted with the City via a phone call. The City provided an overview of the proposed project and project-related offsite improvements and the Kizh Nation provided their knowledge of the project site vicinity, including information about the natural environment and general history of the area, and known villages and trade routes/trails in the area. After the consultation call, the Tribe provided the City with the several documents via email that included information regarding prehistoric and Native American resources in the area.

TABLE 17
SUMMARY OF AB 52 CONSULTATION

Tribe	Contact/Title	Date Email Sent	Response
Gabrieleño Band of Mission Indians-Kizh Nation	Andrew Salas, Chairperson	08/04/2023	Requested consultation on 08/29/2023.
Gabrieleño Band of Mission Indians-Kizh Nation	Christina Swindall Martinez	08/04/2023	Requested consultation on 08/29/2023.
Gabrielino Tongva Indians of California Tribal Council	Robert Dorame, Chairperson	08/04/2023	No response
Gabrielino Tongva Nation	Sandonne Goad, Chairperson	08/04/2023	No response
Santa Rosa Band of Cahuilla Indians	Lovina Redner, Tribal Chair	08/04/2023	No response
Gabrieleno Tongva San Gabriel Band of Mission Indians	Anthony Morales, Chairperson	08/04/2023	No response
Soboba Band of Luiseno Indians	Joseph Ontiveros, Tribal Historic Preservation Officer	08/04/2023	On 08/14/2023, the tribe deferred to Gabrieleno Tongva San Gabriel Band of Mission Indians
Soboba Band of Luiseno Indians	Jessica Valdez, Cultural Resource Specialist	08/04/2023	On 08/14/2023, the tribe deferred to Gabrieleno Tongva San Gabriel Band of Mission Indians

While the Kizh Nation did not identify or provide information regarding any known tribal cultural resources (as defined in PRC Section 21074) within the project site or project-related offsite improvements during consultation with the City, they have indicated that the project site has a high potential to encounter tribal cultural resources during construction given the identification of a Native American village nearby, its proximity to natural water courses and major traditional trade routes, and its location near cultural landscape resources. As a result, the Kizh Nation recommended Native American monitoring during construction of the proposed project and project-related offsite improvements. In addition, the presence of resources CA-LAN-2682 and P-19-187085/Mojave Road in the vicinity of the project site and project-related offsite improvements suggests further that project site has a high potential for retaining buried resources. As a result, there is potential that the proposed project and project-related offsite improvements could cause a substantial adverse change in the significance of a tribal cultural resource as described in PRC Section 21084.2. Accordingly, impacts on tribal cultural resources are considered potentially significant, and mitigation measures for Native American monitoring during implementation of the proposed project and project-related offsite improvements are provided below. The City submitted these measures to the Kizh Nation on January 11, 2024, for their review and comment and they were accepted by the Kizh Nation on January 17, 2024, formally closing AB 52 consultation between the City and the tribe. With implementation of Mitigation Measures TCR-1 through TCR-3, potential impacts to tribal cultural resources would be reduced to less than significant.

Mitigation Measure TCR-1: Prior to the issuance of a demolition permit for the proposed project, the Applicant shall retain a Native American Monitor from the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation or Tribe). The Native American Monitor shall be present during the following construction activities at the project site and project-related offsite improvements that have the potential for encountering tribal cultural resources: demolition, pavement removal, clearing/grubbing, drilling/augering, potholing, grading, trenching, excavation, tree removal or other ground disturbing activity associated with the proposed project, whether on the project site or in connection with the project-related offsite improvements (collectively "ground disturbing activities"). Notwithstanding the foregoing, Native American monitoring shall not be required for any moving of soils after they have been initially disturbed or displaced by project-related construction. The Applicant shall prepare a monitoring agreement with the Kizh Nation that outlines the roles and responsibilities of the Native American Monitor and shall submit this agreement to the City of Carson (City) prior to the issuance of demolition permit for the proposed project.

Prior to commencement ground disturbing activities, a Tribal Cultural Resources Sensitivity Training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities. The training session shall be carried out by the Native American Monitor and shall focus on how to identify tribal cultural resources that may be encountered during ground disturbing activities and the procedures to be followed in such an event. If the Native American Monitor is not present at the project site or project-related offsite improvements on any given workday, the ground disturbing activities may continue if the workers involved in such activities attended the training session.

Full-time monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate by the Native American Monitor in the event there appears to be little to no potential for impacting tribal cultural resources. Native American monitoring shall conclude no later than conclusion of ground disturbing activities.

Mitigation Measure TCR-2: The Native American Monitor shall complete daily monitoring logs that provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant and the City upon written request to the Tribe. The Applicant shall not be deemed to be out of compliance with this measure if the Native American Monitor fails to complete or submit any such monitoring logs.

Mitigation Measure TCR-3: In the event of a discovery of potential tribal cultural resources at the project site or project-related offsite improvements, the Qualified Archaeologist identified in Mitigation Measure CUL-2 (after consultation with the Native American Monitor) shall have the authority to temporarily divert, redirect, or halt ground-disturbance activities to allow identification, evaluation, and potential recovery of such potential resources. After consulting with the Native American Monitor and the Applicant, the Qualified Archaeologist shall establish an appropriate buffer area in accordance with industry standards, reasonable assumptions regarding the potential for

additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the find where ground-disturbing activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.

Within three (3) business days of such discovery, a meeting shall take place between the Applicant, the Qualified Archaeologist, the Tribe, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a). If, as a result of the meeting and after consultation with the Tribe, the Applicant, and the Qualified Archaeologist, the City determines, based on substantial evidence, that the resource is in fact a tribal cultural resource, the Qualified Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the City's Planning Director. The treatment measures in the treatment plan shall be in compliance with any applicable federal, State, or local laws, rules or regulations. The treatment plan shall also include measures regarding the curation of the recovered resources.

The Applicant may recommence ground disturbance activities inside of the specified radius of the discovery site only after it has complied with all of the recommendations developed and approved pursuant to the process set forth above.

The recovered Native American resources may be placed in the custody of the Tribe, who may choose to use them for their educational purposes or they may be curated at a public, non-profit institution with a research interest in the materials. If neither the Tribe nor an institution accepts the resources, they may be donated to a local school or historical society in the area for educational purposes.

Notwithstanding the above paragraph, any information determined to be confidential in nature by the City Attorney's office, shall be excluded from submission to the SCCIC or the general public under the applicable provisions of the California Public Records Act, California Public Resources Code Section 6254®.

XIX. Utilities and Service Systems

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
UTILITIES AND SERVICE SYSTEMS— Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and responsibly foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a) ***Water***

Construction

During construction activities, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, cleanup, and other short-term activities. As discussed in Section X, *Hydrology and Water Quality*, water supply for the proposed project and project-related offsite improvements during construction would be supplied by purchase from the Cal Water Dominguez District. Construction-related water usage is not expected to have an adverse impact on available water supplies, and impacts would be less than significant.

Operation

No new sources of water supply, such as groundwater, are required to meet the water demand of the proposed project and project-related offsite improvements. Water for the proposed project and project-related offsite improvements would be supplied by the Cal Water Dominguez District. Based on the 2020 UWMP, the Cal Water Dominguez District receives its water from 17 percent groundwater, 15 percent recycled water, and 68 percent purchased water (Cal Water 2021). Operation of the proposed project and project-related offsite improvements would require a minimal amount of water for operation and maintenance activities, and the increase in water use would be within the anticipated increase in the Cal Water Dominguez District 2020 UWMP. In addition, operation of the proposed project and project-related offsite improvements would not require the provision of any municipal water supplies. Therefore, operation-related water

usage would not have an adverse impact on available water supplies, and impacts would be less than significant.

Wastewater Treatment

Construction

Construction activities for the proposed project and project-related offsite improvements would not result in wastewater generation as construction workers would utilize portable restrooms, which would not contribute to wastewater flows to the local wastewater system. Therefore, no impact would occur related to wastewater treatment generation during construction.

Operation

The local wastewater treatment system is designed to comply with federal regulations (NPDES) administered by the RWRCB. Moreover, the proposed project and project-related offsite improvements are anticipated to generate minimal wastewater during proposed project and project-related offsite improvements operations and periodic maintenance activities, mostly as a result of landscape irrigation. Therefore, it is not anticipated that implementation of the proposed project and project-related offsite improvements would require construction of new or the expansion of existing wastewater facilities and impacts would be less than significant.

Stormwater

As discussed above in Section X, *Hydrology and Water Quality*, the project site drains towards an existing storm drain inlet adjacent to the project site's western boundary along Alameda Street. Under the proposed project and project-related offsite improvements, the project site would drain to the proposed detention pond in the southwestern corner of the project site. In addition, the proposed project would be required to complete a SWPPP in accordance with the NPDES, which would reduce the potential for stormwater impacts on- and off-site. Furthermore, the proposed project would retain the existing landscaping on site, which accounts for approximately 4.48 percent of the project site. Therefore, impacts related to stormwater drainage would be less than significant.

Electric Power, Natural Gas, and Telecommunications

The proposed project and project-related offsite improvements represents an improvement to the existing electrical power system. Although the proposed project and project-related offsite improvements would require new electrical line tie ins for service, it would not result in the excessive use of electricity during operation. Therefore, proposed project and project-related offsite improvements impacts related to electric power would be less than significant.

The proposed project and project-related offsite improvements would not require new natural gas services connections and would not result in the need for new natural gas supplies or infrastructure. Therefore, the proposed project and project-related offsite improvements would have no impact with regard to natural gas.

The and project-related offsite improvements would require telecommunication facilities to meet the communication requirements for interconnecting and communicating with the SCE/CAISO facilities and to support remote project operations monitoring. To provide for communication with SCE facilities, a fiber-optic cable would be used to connect the proposed project site substation with the SCE Hinson Substation point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The redundant fiber-optic cable would also be installed within the project footprint. The proposed project would use local exchange carrier services for telecommunication to support remote monitoring requirements. The proposed project would connect to telecommunication fiber-optic lines owned and managed by local telecommunication providers. The SCADA system is critical to the CAISO and SCE utility interconnection, and for the proper operation and maintenance of the proposed project. The SCADA system uses proprietary software; a fiber-optic transmission system; a telephone, radio, and/or microwave communication network; and other means of communication such as radio links and phase loop communication systems. The SCADA system functions as a remote start, stop, reset, and tag out for the facility, thus minimizing the labor and site diagnostic information generated from the panels. The SCADA system would also control the substation, allowing for fully centralized operation of the proposed project to meet all CAISO and utility interconnection requirements. However, no new or expanded telecommunications facilities would be required as a result of construction and operation of the proposed project and project-related offsite improvements. Impacts related to telecommunications facilities would be less than significant.

b) As discussed in Section XIX (a) above, the proposed project and project-related offsite improvements are not anticipated to significantly increase water demand and would be within the estimated increase in water demand for the Cal Water Dominguez District. According to the 2020 UWMP for the Cal Water Dominguez District, there is sufficient supply to accommodate demand under normal, single- dry year, and multiple-dry year hydrologic conditions (Cal Water 2021). The UWMP is based on area population projections as provided by SCAG. The proposed project and project-related offsite improvements would be consistent with SCAG projections for the service area as it would not generate any new employment or population in the area. As the estimated increase in water use would be within the anticipated increase in the 2020 UWMP for the Cal Water Dominguez District and the proposed project and project-related offsite improvements would be consistent with regional population projections, impacts related to water supplies would be less than significant.

c) As discussed in Section XIX (a) above, the local wastewater treatment system is designed to comply with federal regulations (NPDES) administered by the RWRCB. Moreover, the proposed project and project-related offsite improvements are anticipated to generate minimal wastewater during normal operations and periodic maintenance activities, mostly as a result of landscape irrigation. Therefore, it is not anticipated that implementation of the proposed project and project-related offsite improvements would

require construction of new or the expansion of existing wastewater facilities and impacts would be less than significant.

The project site and project-related offsite improvements are located within the existing service area of the Cal Water Dominguez District and the project site is surrounded by existing development that is currently connected to existing water and wastewater lines. No additional improvements are needed to either water lines, sewer lines, or treatment facilities to serve the proposed project and project-related offsite improvements. Therefore, impacts related to wastewater treatment capacity would be less than significant.

d) A substantial amount of solid waste is disposed of throughout the region, requiring ongoing landfill expansions. According to the City of Carson General Plan, solid waste generated by industrial, commercial, and residential uses in the city is collected by Waste Management. Waste Management collects an estimated 153,500 tons from commercial and industrial customers per year. Solid waste collected by Waste Management is transported to the Carson Transfer Station and Materials Recovery where it is sorted by material type. The 10-acre facility has a permitted capacity of 5,300 tons per day (Los Angeles County 2021). Once the materials have been sorted, tires, green waste, steel, and wood are diverted to special facilities for disposal and recycling. Excess solid waste is sent to El Sobrante Landfill in Riverside County, approximately 75 miles from the city. Waste Management also disposes solid waste to Lancaster Landfill and Simi Valley Landfill as alternates. The total permitted throughput for all landfills is 85,904 tons per day, and approximately 241.4 million cubic yards of capacity remain (California Department of Resources Recycling and Recovery [CalRecycle] 2019a, 2019b, 2019c). As under existing conditions, solid waste would be collected by Waste Management and taken to the appropriate Sanitation Districts of Los Angeles County landfill with remaining capacity. Landfills operated by Sanitation Districts of Los Angeles County are subject to federal and State programs that regulate operations and capacity in consideration of solid waste reduction goals.

In addition, according to the 2020 Annual Report for the Countywide Integrated Waste Management Plan (CIWMP), the remaining capacity at County-operated landfills is 207.31 million tons (County of Los Angeles 2021). Approximately 11,600 sf existing administrative and storage building located in the southwest corner of the project site would be demolished. Construction of the proposed project and project-related offsite improvements would result in generation of construction and demolition debris such as metal scrap, lumber, concrete which will be collected and diverted to a construction and demolition debris facility for materials to be recycled and/or discarded. However, as required by the Construction and Demolition Debris Recycling and Reuse Program (C&D) Program, the proposed project and project-related offsite improvements would be required to divert a minimum of 65 percent of C&D waste from landfills. Residual wastes, such as trash packing materials, and plastics could require disposal at landfill. As the proposed project and project-related offsite improvements would be required to divert

65 percent of solid waste from landfills, the remaining capacity of County-operated landfills would be minimally affected due to construction.

All collection, transportation, and disposal of any solid waste generated by the proposed project and project-related offsite improvements during construction and operation would comply with all applicable federal, State, and local statutes and regulations. In particular, AB 939 requires that at least 50 percent of solid waste generated by a jurisdiction be diverted from landfill disposal through source reduction, recycling, or composting. Cities, counties, and regional agencies are required to develop a waste management plan that would achieve a 50 percent diversion from landfills (Public Resources Code Section 40000 et seq.). Furthermore, as required by existing regulations, any hazardous materials collected on the project site during demolition, construction, or operational activities would be transported and disposed of by a permitted and licensed hazardous materials service provider at a facility permitted to accept such hazardous materials. As such, the proposed project and project-related offsite improvements are not anticipated to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, this impact would be less than significant.

e) The project site and project-related offsite improvements are subject to State and City mandates with respect to solid waste, such as implementation of the City's Diversion and Recycling Program. The proposed project and project-related offsite improvements would comply with all federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City requirements for solid waste generated during construction and operation of the proposed project and project-related offsite improvements. Compliance with these regulations would ensure that a less-than-significant impact would occur.

XX. Wildfire

Issues (and Supporting Information Sources)	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less-than-Significant Impact*	*No Impact*
WILDFIRE— If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

a) As noted previously, the project site and project-related offsite improvements are not within a VHFHSZ. As analyzed in Section IX, *Hazards and Hazardous Materials*, above, primary access to the project site would be provided from Alameda Street and would not result in any permanent alterations to vehicular circulation routes or obstruct public access along adjacent roadways that would impair an adopted emergency response plan or emergency evacuation plan. All construction staging would occur within the boundaries of the project site and project-related offsite improvements and would not interfere with circulation along the adjacent roadways, or any other nearby roadways. The City has prepared a Multi-Hazard Functional Plan (1996) for emergency response within the city. The plan identifies emergency protocol, critical meeting areas, and emergency evacuation routes. The four major freeways (I-405, SR-91, I-110, and I-710) as well as arterial streets with right-of-way widths from 80 to 100 feet at one-half mile intervals would serve as potential evacuation routes during a disaster. Potential evacuation routes that are located near the site include East Sepulveda Boulevard and Alameda Street. The project site and project-related offsite improvements are not located directly along an evacuation route and operations under the proposed project and project-related offsite improvements would not interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

b) The project site is currently developed as an aggregate recycling center and surrounded by mixed industrial uses. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. The project site and project-related offsite improvements would continue to be served by the LACFD. According to CAL FIRE, the proposed

project and project-related offsite improvements are not located within a VHFHSZ (CAL FIRE 2022). The proposed battery packs would be NFPA 855 Code compliant and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules in the event of an emergency. The LACFD would review and approve the facility fire protection and suppression plans prior to approval of the proposed project and project-related offsite improvements. Therefore, the proposed project and project-related offsite improvements would not expose people to significant pollutant concentrations resulting from wildland fires, or the uncontrolled spread of a wildfire. Impacts related to exacerbating wildfire risks due to slope, prevailing winds, and other factors would be less than significant.

c) The proposed project and project-related offsite improvements involves the installation or maintenance of associated infrastructure that may exacerbate fire risk. As described above, the proposed battery packs would be NFPA 855 Code compliant and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules in the event of an emergency. The project site and project-related offsite improvements are not located in a VHFHSZ and the proposed project and project-related offsite improvements would be constructed in compliance with the CBC and CFC, to ensure implementation of the proposed project and project-related offsite improvements would not exacerbate fire risks or result in temporary or ongoing environmental impacts. Therefore, impacts would be less than significant.

d) As described above, the project site and project-related offsite improvements are located partially within an urbanized area and partially within an open space area and would continue to be served by the LACFD. Additionally, according to CAL FIRE, the project site and project-related offsite improvements are not located within a VHFHSZ (CAL FIRE 2022). Given the local topographic and environmental characteristics of the project site and project-related offsite improvements, the proposed project and project-related offsite improvements would not increase the possibility of wildland fire in the project vicinity.

Additionally, no streams, rivers or natural drainages occur on the project site and project-related offsite improvements. The project site is adjacent to the Dominguez Channel. However, the proposed project and project-related offsite improvements would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances, which help prevent flood damage. Due to the relatively flat topography of the project site, project-related offsite improvements, and surrounding area, the proposed project and project-related offsite improvements would not expose people or structures to flooding or potential landslides. Therefore, no impacts would occur related to exposing people or structures to significant risk.

XXI. Mandatory Findings of Significance

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

Discussion

a) The proposed project is a battery energy storage facility consisting of lithium-ion (or similar technology available at the time of construction) batteries installed in racks, inverters, MV transformers, switchgear, a collector substation, and other associated equipment to interconnect into the SCE Hinson Substation. As discussed in Section IV, Biological Resources, the project site is currently developed as an aggregate recycling center and is located within the city of Carson within a highly industrialized area. The proposed gen-tie line originates at the project site and travels partially through an urbanized area within the City of Carson and City of Los Angeles and partially through an open space area to the SCE Hinson Substation located within the City of Long Beach. As stated in the Biological Constraints Analysis Memorandum (Dudek 2022) and Biological Resources Technical Memorandum (ESA 2023), database reviews showed that the project site and gen-tie line are not overlain within USFWS-designated Critical Habitat for any special-status plant or wildlife species (USFWS 2023).

Generally, limited suitable avian nesting habitat is present within the project site and project-related offsite improvements due to the dominance of developed and disturbed areas. However, many avian species are known to nest and forage within ornamental shrubs and trees planted as part of existing landscaping and man-made structures and buildings. The existing landscaping and man-made structures provide suitable nesting habitat for several common and migratory bird species protected under the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 3513. Therefore, construction of the proposed project and project-related offsite improvements may affect nesting birds, as a very limited amount of suitable habitat occurs for common and migratory bird

species within the project site and project-related offsite improvements. Mitigation Measure BIO-1 would be required prior to or during construction.

Dominguez Channel supports aquatic habitat that is regulated by the CDFW, RWQCB, and USACE. No direct impacts are planned to occur within Dominguez Channel resulting from proposed project and project-related offsite improvements activities since installation of poles for the gen-tie line would occur outside of the channel. Additionally, no sensitive natural communities occur within the project site and project-related offsite improvements. While no direct impacts to riparian or sensitive natural communities are proposed, construction would occur adjacent to Dominguez Channel which has the potential to result in runoff into the channel. However, implementation of Mitigation Measure BIO-2 would reduce potential indirect impacts to the Dominguez Channel during construction to less than significant. Therefore, the proposed project and project-related offsite improvements does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish, or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animals.

As indicated in Section V, Cultural Resources, under the proposed project and project-related offsite improvements, physical alterations and demolition of historical resources must be avoided, and if impacts cannot be avoided, they must be reduced to a less than significant impact through implementation of Mitigation Measure CUL-1. Further, the proposed project and project-related offsite improvements have a moderate potential to encounter buried prehistoric archaeological resources, including human remains, during construction given the identification of CA-LAN-2682 and the Native American village of *Suangna* in the vicinity of the project site, the presence of Holocene-age alluvium that underlies the project site that has been deposited within the past 11,700 years, the project site's location in close proximity to water sources, and since the project site retains a low degree of slope. With implementation of Mitigation Measures CUL-2, CUL-3, and CUL-4, impacts to archaeological resources would be less than significant. If human remains are encountered during construction, disturbance of those remains could result in a potentially significant impact. With implementation of Mitigation Measure CUL-5, which requires following state laws in the event of a human remains discovery, impacts to human remains would be less than significant. Therefore, the and project-related offsite improvements would not potentially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, a less-than-significant impact would occur with mitigation.

b) A significant impact may occur if the proposed project and project-related offsite improvements, in conjunction with the related projects, would result in impacts that are significant when taken together. With the incorporation of mitigation, the and project-

related offsite improvements would have less-than-significant or no impacts with respect to all environmental topics, as discussed in the above checklist. Related projects would also be required to mitigate any impacts to the maximum extent feasible. Therefore, with mitigation incorporated, the proposed project and project-related offsite improvements together with related projects would not result in significant cumulative impacts.

c) A significant impact may occur if the proposed project and project-related offsite improvements have the potential to result in significant impacts, as discussed in the preceding sections. All potential impacts of the proposed project and project-related offsite improvements have been identified, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less-than-significant levels. The and project-related offsite improvements would comply with all applicable permits, regulations, and other conditions imposed by the City of Carson and responsible agencies. Therefore, impacts associated with the proposed project and project-related offsite improvements would be less than significant.

CHAPTER 4
Mitigation Monitoring and Reporting Program

4.1 CEQA Requirements

Table 18, Mitigation Monitoring and Reporting Program for the City of Carson Avocet Energy Storage Project is a Mitigation Monitoring and Reporting Program (MMRP) for the Project, which has been prepared pursuant to CEQA Guidelines Section 15097 and Public Resources Code Section 21081.6. This MMRP lists all applicable mitigation measures from the IS/MND. The appropriate timing of implementation and responsible party are identified to ensure proper enforcement of the mitigation measures from the IS/MND to reduce Project impacts to less than significant levels. Mitigation measures are presented in the same order as they occur in the IS/MND.

The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less than significant level.
- **Implementation Action:** The action(s) listed out, according to the identified mitigation measure that would be implemented by the responsible agency.
- **Responsible Implementation Agency:** The agency or private entity responsible for ensuring implementation of the mitigation measure. For the Project, the City of Carson, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines Section 15097(a)).
- **Timing of Verification:** The general timing for implementing each mitigation measure.
- **Verification Date:** The date in which the mitigation measure has been completed.

The MMRP will be kept on file at the following address:

City of Carson, Community Development Department – Planning Division
701 East Carson Street
Carson, CA 90745

TABLE 18
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE CITY OF CARSON AVOCET ENERGY STORAGE PROJECT

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Biological Resources			
Mitigation Measure BIO-1: Nesting Birds/Raptors. If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.	If work activities occur within the avian nesting season, nesting bird surveys should be completed 3 days before ground disturbance activities. If nests are found, buffers should be delineated, and nests shall be avoided.	Project Applicant Qualified Biologist Project Contractor	Prior to the start of construction
Mitigation Measure BIO-2: Aquatic Resources. The following are recommended to reduce aquatic resource impacts as a result of project activities: • Prior to installation of the overhead transmission line over Navigable Waters (Dominguez Channel), consultation with USACE is recommended to determine whether a Section 10 permit will be necessary. • Erosion control measures (i.e. silt fencing, straw wattles, etc.) should be implemented adjacent to the Dominguez Channel when work is occurring adjacent to the Dominguez Channel to prevent sediment/contaminants from continuing offsite into the channel. • Re-fueling of equipment should be conducted at least 50 feet from the Dominguez Channel. • Drip pans should be placed underneath all mechanical machinery that will be staged adjacent to the Dominguez Channel	Prior to installation of the overhead transmission line, consultation with USACE regarding a Section 10 permit should occur. Erosion control measures shall be implemented.	Project Applicant USACE Staff Project Contractor	Prior to installation of the overhead transmission line

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Cultural Resources			
Mitigation Measure CUL-1: Prior to the issuance of a demolition permit, the Applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during initial project construction work such as demolition, clearing/grubbing, grading, trenching, or related moving of soils (collectively, ground disturbing activities) within the project site and project-related offsite improvements ; provided, however, that ground disturbing activities shall not include any moving of soils after they have been initially disturbed or displaced by project-related construction. The Qualified Archaeologist shall determine the frequency of monitoring based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. The frequency of monitoring can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist. Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.	Prior to the issuance of a demolition permit, the Applicant shall retain an archaeologist. Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel.	Project Applicant Qualified Archaeologist	Prior to the issuance of a demolition permit. Prior to the start of excavation activities.
Mitigation Measure CUL-2: In the event that historic or prehistoric archaeological resources (e.g., bottles, foundations, refuse dumps, shell midden, lithic/stone tool materials, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. After consulting with the Applicant, the Qualified Archeologist shall establish an appropriate buffer in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the ground where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.	In the event of the unanticipated discovery of historic or prehistoric archaeological resources archaeological materials, the Project Contractor(s) shall immediately cease all work activities in the area of the discovery until it can be evaluated by a qualified archaeologist. If a historic or unique archaeological is unearthed, the Qualified Archaeologist shall coordinate with the Applicant and the City of Carson	Project Contractor(s) Qualified Archaeologist	During demolition, grading and/or construction.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines the find to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Applicant and the City of Carson (City) to develop a reasonable and feasible treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the resources, they may be donated to a local school or historical society in the area (such as a local historical society or school) for educational purposes.	(City) to develop a reasonable and feasible treatment plan.		
Mitigation Measure CUL-3: The Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and project-related offsite improvements and required mitigation measures.	The Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring.	Qualified Archaeologist	At the conclusion of archaeological monitoring
Mitigation Measure CUL-4: If human remains are encountered unexpectedly during implementation of the proposed project and project-related offsite improvements, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most	If human remains are encountered, the contractor should halt work in the vicinity of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the California	Qualified Archaeologist Project Contractor	Prior to and during grading and/or construction.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Likely Descendent (MLD). The MLD may, with the permission of the landowner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.	Native American Heritage Commission (NAHC) will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by Assembly Bill 2641). The NAHC will designate a Most Likely Descendent (MLD) for the remains per PRC Section 5097.98.		

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Geology and Soils			
Mitigation Measure PALEO-1: The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources. Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be specifically encountered in Pleistocene to early Holocene alluvial deposits, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The City of Carson shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.	Prior to the start of ground disturbing activities, the Project Applicant shall retain a qualified paleontologist. Prior to the start of ground-disturbing activities, construction personnel shall be trained in the identification of paleontological resources.	Project Applicant Qualified Paleontologist Project Contractor	Prior to the start of ground disturbing activities
Mitigation Measure PALEO-2: Paleontological monitoring shall be conducted during ground-disturbing activities below 20 feet in Quaternary alluvium (Qyf and Qya2) and at all depths within the older alluvium (Qoa) at the surface along the southern portion of the gen-tie line as depicted in Figure 5, Geologic Map, of the Paleontological Resources Assessment (**Appendix F** of the IS/MND). Monitoring shall be conducted by a qualified paleontological monitor (SVP, 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.	Paleontological monitoring shall be conducted during ground-disturbing activities below 20 feet in Quaternary alluvium (Qyf and Qya2) and at all depths within the older alluvium (Qoa) at the surface along the southern portion of the gen-tie line, until the Paleontologist determines full-time monitoring is no longer warranted.	Qualified Paleontologist Project Contractor	During grading and/or construction.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Mitigation Measure PALEO-3: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school. If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.	In the event of the unanticipated discovery of fossils, the Project Contractor(s) shall immediately cease all work activities in the area (within approximately 50 feet) of the discovery until it can be evaluated by a qualified paleontologist. If fossils are determined to be significant, the qualified paleontologist will implement a paleontological salvage program to remove the resources from their location.	Qualified Paleontologist Project Contractor	During grading and/or construction.
Mitigation Measure PALEO-4: At the conclusion of paleontological monitoring and prior to the release of the grading bond, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Qualified Paleontologist to the City of Carson and the Natural History Museum of Los Angeles County to signify the satisfactory completion of the project and required mitigation measures.	The Qualified Paleontologist shall prepare a final report at the conclusion of monitoring.	Qualified Paleontologist	At the conclusion of paleontological monitoring

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Tribal Cultural Resources			
Mitigation Measure TCR-1: Prior to the issuance of a demolition permit for the proposed project, the Applicant shall retain a Native American Monitor from the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation or Tribe). The Native American Monitor shall be present during the following construction activities at the project site and project-related offsite improvements that have the potential for encountering tribal cultural resources: demolition, pavement removal, clearing/grubbing, drilling/augering, potholing, grading, trenching, excavation, tree removal or other ground disturbing activity associated with the proposed project, whether on the project site or in connection with the project-related offsite improvements (collectively "ground disturbing activities"). Notwithstanding the foregoing, Native American monitoring shall not be required for any moving of soils after they have been initially disturbed or displaced by project-related construction. The Applicant shall prepare a monitoring agreement with the Kizh Nation that outlines the roles and responsibilities of the Native American Monitor and shall submit this agreement to the City of Carson (City) prior to the issuance of demolition permit for the proposed project. Prior to commencement ground disturbing activities, a Tribal Cultural Resources Sensitivity Training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities. The training session shall be carried out by the Native American Monitor and shall focus on how to identify tribal cultural resources that may be encountered during ground disturbing activities and the procedures to be followed in such an event. If the Native American Monitor is not present at the project site or project-related offsite improvements on any given workday, the ground disturbing activities may continue if the workers involved in such activities attended the training session. Full-time monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate by the Native American Monitor in the event there appears to be little to no potential for impacting tribal cultural resources. Native American monitoring shall conclude no later than conclusion of ground disturbing activities.	Prior to the issuance of a demolition permit for the proposed project, the Applicant shall retain a Native American Monitor from the Gabrieleño Band of Mission Indians – Kizh Nation. The Tribal Monitor will only be present on-site during the construction phases that involve ground-disturbing activity. Prior to commencement ground disturbing activities, a Tribal Cultural Resources Sensitivity Training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities.	Project Applicant Tribal Monitor approved by the Consulting Tribe and the qualified archaeologist	Prior to the issuance of a demolition permit.

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
Mitigation Measure TCR-2: The Native American Monitor shall complete daily monitoring logs that provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant and the City upon written request to the Tribe. The Applicant shall not be deemed to be out of compliance with this measure if the Native American Monitor fails to complete or submit any such monitoring logs.	**T**he Native American Monitor shall complete daily monitoring logs that provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe.	Native American Monitor	During ground-disturbing activities
Mitigation Measure TCR-3: In the event of a discovery of potential tribal cultural resources at the project site or project-related offsite improvements, the Qualified Archaeologist identified in Mitigation Measure CUL-2 (after consultation with the Native American Monitor) shall have the authority to temporarily divert, redirect, or halt ground-disturbance activities to allow identification, evaluation, and potential recovery of such potential resources. After consulting with the Native American Monitor and the Applicant, the Qualified Archaeologist shall establish an appropriate buffer area in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the find where ground-disturbing activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. Within three (3) business days of such discovery, a meeting shall take place between the Applicant, the Qualified Archaeologist, the Tribe, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a). If, as a result of the meeting and after consultation with the Tribe, the Applicant, and the Qualified Archaeologist, the City determines, based on substantial evidence, that the resource is in fact a tribal cultural resource, the Qualified Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the City's Planning Director. The treatment measures in the treatment plan shall be in compliance with any applicable	Upon discovery of any tribal cultural resources, construction activities shall cease or be diverted to allow identification, evaluation, and potential recovery of such potential resources. Within three (3) business days of such discovery, a meeting shall take place between the Applicant, the Qualified Archaeologist, the Tribe, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource. If, based on substantial evidence, it is determined that the resource is in fact a tribal cultural resource, the Qualified Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the City's Planning Director.	City of Carson Project Applicant Tribal Monitor approved by the Consulting Tribe and the qualified archaeologist	During construction activities

Mitigation Measure	Implementation Action	Responsible Implementation Agency/Party	Timing Verification
federal, State, or local laws, rules or regulations. The treatment plan shall also include measures regarding the curation of the recovered resources. The Applicant may recommence ground disturbance activities inside of the specified radius of the discovery site only after it has complied with all of the recommendations developed and approved pursuant to the process set forth above. The recovered Native American resources may be placed in the custody of the Tribe, who may choose to use them for their educational purposes or they may be curated at a public, non-profit institution with a research interest in the materials. If neither the Tribe nor an institution accepts the resources, they may be donated to a local school or historical society in the area for educational purposes. Notwithstanding the above paragraph, any information determined to be confidential in nature by the City Attorney's office, shall be excluded from submission to the SCCIC or the general public under the applicable provisions of the California Public Records Act, California Public Resources Code Section 6254®.			

CHAPTER 5

Preparers, Acronyms and Abbreviations and References

5.1 Preparers

Lead Agency

City of Carson
701 East Carson Street
Carson, CA 90745

- McKina Alexander, Senior Planner

Initial Study/Mitigated Negative Declaration Preparation

ESA
420 Exchange, Suite 260
Irvine, CA 92602

- Brian Allee, Planner IV (Project Manager).
- Alan Sako, Director and Air Quality & Acoustics Analyst V (Air Quality, Greenhouse Gas Emissions, Energy, Noise)
- Kyle Garcia, RPA, Cultural Resource Specialist V (Cultural Resources)
- Sara Dietler, Cultural Resource Specialist VI (Cultural Resources)
- Russell Shapiro, Ph. D., Technical Specialist (Cultural Resources)
- Fatima Clark, Cultural Resource Specialist IV (Cultural Resources)
- Salpi Bocchieriyan, RPA, Cultural Resource Specialist III (Cultural Resources)
- Anokhi Varma, Cultural Resource Specialist II (Cultural Resources)
- Margarita Jerabek, Ph. D., Cultural Resource Specialist VI (Historical Resources)
- Dan Swenson, Environmental Scientist V (Biological Resources)
- Amanda French, Biologist III (Biological Resources)

Technical Subconsultant

Dudek
27271 Las Ramblas, Suite 340
Mission Viejo, CA 92691

- Keith Carwana, Project Manager

Globus Engineering, Inc.
1536 West 25th Street, #320
San Pedro, CA 90732

- Uday K. Patil, P.E., G.E., Principal

NV5, Alta Environmental
3777 Long Beach Boulevard Annex Building
Long Beach, CA 90807

- Jonathan Barkman, Project Manager
- Eric Fraske, PE, Senior Engineer
- Bina Patel, Associate III/Staff Geologist

5.2 Acronyms and Abbreviations

Acronym or Abbreviation	Definition
AB	Assembly Bill
AC	alternating current
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
ATCM	Air Toxics Control Measure
BC3	Business Council on Climate Change
BESS	battery energy storage system
BMP	best management practice
CAAQS	the California Ambient Air Quality Standards
CAISO	California Independent System Operator
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CBC	California Building Code
CC	Community Commercial
CCVT	coupling capacitor voltage transformer
CDC	California Department of Conservation

Acronym or Abbreviation	Definition
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH4	methane
CIWMP	Countywide Integrated Waste Management Plan
CMC	Carson Municipal Code
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
COC	chemical of concern
CPA	Clean Power Alliance
CPUC	California Public Utilities Commission
CUPA	Certified Unified Program Agency
dB	decibels
dBA	A-weighted decibels
DC	direct current
DPM	diesel particulate matter
DT	Downtown
EECAP	Energy Efficiency Climate Action Plan
EMFAC	on-road vehicle emissions factor
ESA	Environmental Site Assessment
FCEV	fuel cell electric vehicle
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
GHG	greenhouse gas
GWh	gigawatt-hours
GWP	global warming potential
HAP	hazardous air pollutant
HFC	hydrofluorocarbon
HHD	heavy-heavy-duty
HMBP	hazardous materials business plans
HREC	historical recognized environmental condition
HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change

Acronym or Abbreviation	Definition
kV	kilovolt
kW	kilowatt
LACFD	Los Angeles County Fire Department
LACM	History Museum of Los Angeles County
LACMC	Los Angeles County Municipal Code
LARWQCB	Los Angeles Regional Water Quality Control Board
LASD	Los Angeles County Sheriff
LBMC	Long Beach Municipal Code
LCFS	Low Carbon Fuel Standard
LID	low impact development
LNAPL	light non-aqueous phase liquid
LOS	level of service
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MEER	mechanical electrical equipment room
MMT	million metric ton
MRF-L	Multi-Family Residential-Low
MRF-M	Multi-Family Residential-Moderate
MRZ-2	Mineral Resource Zone 2
MT	metric ton
MTCO2e	metric ton of carbon dioxide equivalent
MV	medium-voltage
MWh	megawatt-hours
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NI	Neo-Industrial
NOX	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NWI	National Wetlands Inventory
OEHHA	Office of Environmental Health Hazard Assessment
OIC	Operator Interface Cabinet
OS	Open Space
PFC	perfluorocarbons
PPV	peak particle velocity

Acronym or Abbreviation	Definition
RCP	Regional Comprehensive Plan
REC	recognized environmental condition
RHA	Rivers and Harbors Act
RPS	California Renewables Portfolio Standard
RSF	Regional Serving Facility
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCADA	supervisory control and data acquisition
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SF6	sulfur hexafluoride
SO2	sulfur dioxide
SPCC	spill prevention control and countermeasures
SRA	Source Receptor Area
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	toxic air contaminant
TOD-L	Transit-Oriented Development-Low
TOD-M	Transit-Oriented Development-Moderate
TSP	tubular steel pole
UL	Underwriter Laboratories
UPRR	Union Pacific railroad
USACE	United States Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VdB	velocity in decibels
VEC	vapor encroachment condition
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WF	Waterfront

5.3 References

Project Description

City of Carson. 2017. City of Carson Zoning Map. https://gis.carson.ca.us/pdfs/mapgallery/Zoning_11x17.pdf

City of Carson. 2022. City of Carson General Plan Environmental Impact Report. December 2022. https://www.dropbox.com/s/vehwfp2ww64zj5g/0_Carson2040%20FEIR.pdf?dl=0.

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.

City of Carson. 2022. Carson Municipal Code, Article V: Sanitation and Health, Chapter 5: Noise Control Ordinance. https://www.codepublishing.com/CA/Carson/#!/Carson05/Carson050500.html.

City of Long Beach. 2019. December 3, 2019. Long Beach 2040. Map Page 19. https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/land-use-maps/lb2040_mapbook_page_19.

City of Long Beach. 2021. June 30, 2021. City of Long Beach Use District Map: Page 14. https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/zoning-maps/zoning_map_book_color_page_14

City of Long Beach. 2023. Land Use District Map. https://www.longbeach.gov/lbcd/planning/advance/maps/land-use-district-maps2/.

City of Long Beach. 2023. Zoning Map. https://www.longbeach.gov/lbcd/planning/advance/maps/zoning/.

City of Long Beach. 2022. Long Beach Municipal Code, Title 8: Health and Safety, Chapter 8.80: Noise. https://library.municode.com/ca/long_beach/codes/municipal_code?nodeId=TIT8HESA_CH8.80NO.

City of Los Angeles. 2022. Los Angeles Municipal Code, Chapter XI: Noise Regulation. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-19374.1.

NV5. 2021. Phase I Environmental Site Assessment Report. September 30, 2021.

Aesthetics

California Department of Transportation (Caltrans). 2021. California Scenic Highway Mapping System, List of Eligible and Officially Designated State Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed December 15, 2021.

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.

City of Long Beach. 2019. Recirculated Draft Environmental Impact Report General Plan Land Use and Urban Design Elements Project. SCH No. 2015051054, June 2019.

City of Long Beach. 2019. Land Use Map, Map 19, https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/land-use-maps/lb2040_mapbook_page_19, accessed November 27, 2023.

City of Long Beach. 2019. City of Lang Beach Use District Map: Page 14, https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/zoning-maps/zoning_map_book_color_page_14, accessed November 27, 2023.

City of Los Angeles. 2021. Citywide Housing Element 2021-2029 and Safety Element Updates Draft Environmental Impact Report. SCH No. 2021010130, July 2021.

Agriculture and Forestry Resources

California Department of Conservation, Division of Land Resource Protection. 2022. Farmland Mapping and Monitoring Program, Important Farmland Finder, https://maps.conservation.ca.gov/dlrp/ciff/, accessed September 14, 2022.

CDC (California Department of Conservation, Division of Land Resources Protection). 2017. State of California Williamson Act Contract Land.

City of Carson. 2023. City of Carson General Plan, Land Use and Revitalization Element.

City of Long Beach. 2023. Land Use District Map. https://www.longbeach.gov/lbcd/planning/advance/maps/land-use-district-maps2/.

City of Long Beach. 2023. Zoning Map. https://www.longbeach.gov/lbcd/planning/advance/maps/zoning/.

Air Quality

CARB (California Air Resources Board). 2003a. *OFFROAD Modeling Change Technical Memo*, revised June 13. 2003_0613_CARB_OFFROADTechMemo.pdf (sj-admin.s3-us-west-2.amazonaws.com), accessed November 2023.

City of Long Beach. 2023. Land Use District Map. https://www.longbeach.gov/lbcd/planning/advance/maps/land-use-district-maps2/.

City of Long Beach. 2023. Zoning Map. https://www.longbeach.gov/lbcd/planning/advance/maps/zoning/.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0, accessed November 2023.

SCAG (Southern California Association of Governments). 2020. 2020–2045 Regional Transportation Program/Sustainable Communities Strategy, May 2020.

SCAQMD (South Coast Air Quality Management District). 2022. 2022 Air Quality Management Plan (AQMP). final-2022-aqmp.pdf (aqmd.gov), accessed November 2023

SCAQMD. 2003a. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

SCAQMD. 2003b. 2003 Air Quality Management Plan. Appendix V: Modeling and Attainment Demonstrations, page V-4-24.

SCAQMD. 2008. Final Localized Significance Threshold Methodology. http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed November 2023.

SCAQMD. 2015. Air Quality Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, accessed November 2023.

Biological Resources

CDFW (California Department of Fish and Wildlife). 2022. California Natural Diversity Database (CNDDB). RareFind 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed December 2022. https://nrmsecure.dfg.ca.gov/cnddb/Default.aspx.

CDFW. 2023a. California Natural Diversity Data Base (CNDDB). https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed October 17, 2023.

CDFW. 2023b. California Sensitive Natural Communities List. Sacramento, CA: CDFW, Natural Heritage Division, July 5, 2022. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline. Accessed October 17, 2023.

CNPS (California Native Plant Society). 2022. Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed December 2022. https://rareplants.cnps.org/

CNPS. 2023. Inventory of Rare and Endangered Vascular Plants of California. https://rareplants.cnps.org/Search/Advanced. Accessed October 17, 2023.

Dudek. 2022. Avocet Energy Storage Project Biological Constraints Analysis. Prepared by Keith Carwana on December 9, 2022, for Avocet Energy Storage, LLC.

ESA (Environmental Science Associates). 2023. Avocet Energy Storage System Project Biological Resources Technical Memorandum. Prepared by Amanda French and Dan Swenson on November 10, 2023, for City of Carson.

USACE (U.S. Army Corps of Engineers). 1981. Navigable Waters of the United States; Dominguez Channel. https://www.spl.usace.army.mil/Portals/17/docs/regulatory/JD/NavigableWater/CA_Sec10_Nav_Det/1981-07-21_D11_Memo.pdf?ver=3kzxj4SFaOAdmwuW-hU-Uw%3d%3d. Accessed October 2, 2023.

USFWS (U.S. Fish and Wildlife Service). 2023a. Critical Habitat Portal. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed October 17, 2023.

USFWS (U.S. Fish and Wildlife Service). 2023b. National Wetland Inventory. https://www.fws.gov/wetlands/data/Mapper.html. Accessed October 17, 2023.

Energy

California Gas and Electric Utilities, 2022. California Gas Report. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf. Accessed July 2023.

City of Carson. 2015. Energy Efficiency Climate Action Plan, December.

Clean Power Alliance. 2018. Member Agency Default Tier, November. https://cleanpoweralliance.org/wp-content/uploads/2019/01/Clean-Power-Alliance-Member-Agency-Default-Tier-Choices.pdf, accessed November 2023.

SCE (Southern California Edison). 2023. Annual Report. Available at: Source: Southern California Edison 2022 Annual Report. https://s3.amazonaws.com/cms.ipressroom.com/406/files/20232/2022-eix-sce-annual-report.pdf. accessed November 2023.

USEPA (United States Environmental Protection Agency). 2011. Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August.

USEPA. 2016. Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25.

Geology and Soils

California Geological Survey (CGS). 1999. Earthquake Zones of Required Investigation- Long Beach Quadrangle. https://filerequest.conservation.ca.gov/?q=LONG_BEACH_EZRIM.pdf, accessed January 3, 2023.

California Geological Survey (CGS). 2023. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed November 30, 2023.

Globus Engineering Inc. 2022. CEQA Geotechnical Input for Avocet Energy Storage LLC. December 22, 2022.

Greenhouse Gas Emissions

CalEPA. 2006. (California Environmental Protection Agency), Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006. https://planning.lacity.org/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.23_CalEPA%202006%20Report%20to%20Governor.pdf. Accessed July 2023.

California Air Resources Board (CARB). 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed July 2023.

CARB, 2022. California Greenhouse Gas Inventory for 2000-2020– Trends of Emissions and Other Indicators, https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf. Accessed November 2023.

City of Carson. 2015. Energy Efficiency Climate Action Plan, December.

IPCC (Intergovernmental Panel on Climate Change). 2001. Climate Change 2001: Working Group I: The Scientific Basis, https://www.ipcc.ch/report/ar3/wg1/, accessed December 15, 2021.

SCAG (Southern California Association of Governments). 2020. Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, May 2020.

SCAQMD (South Coast Air Quality Management District). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October.

SCE (Southern California Edison). 2023. 2022 Power Content Label. SCE_2022 Power Content Label

Hazards and Hazardous Materials

CAL FIRE (California Department of Forestry and Fire Protection). 2022. FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/, accessed April 25, 2022.

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.Department of Toxic Substances Control (DTSC). 2017. EnviroStor Database. Available at http://www.envirostor.dtsc.ca.gov/public/. Accessed May 10, 2018.

Department of Toxic Substances Control (DTSC), Hazardous Waste Tracking System, Available at https://hwts.dtsc.ca.gov/report_search.cfm?id=5. Accessed August 2018.

Federal Emergency Management Agency (FEMA). 2023. FIRMETTE 06037C1961G and 06037C1955F, https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd, accessed November 28, 2023

Los Angeles County Airport Land Use Commission. 2003. Torrance Airport – Airport Influence Area. May 13, 2003.

NV5 2021. Phase 1 Environmental Site Assessment Report. Prepared by NV5 Alta Environmental. September 30, 2021.

NV5 2023. Phase 1 Environmental Site Assessment Report. Prepared by NV5 Alta Environmental. April 27, 2023.

Hydrology and Water Quality

California Geological Survey (CGS). 2021. CGS Information Warehouse: Tsunami Hazard Area Map. https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/, accessed January 3, 2023.

California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan Dominguez District. June 2021, https://www.calwater.com/docs/uwmp2020/DOM_2020_UWMP_FINAL.pdf, accessed January 11, 2023.

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.Federal Emergency Management Agency (FEMA). 2023. FIRMETTE 06037C1961G and 06037C1955F https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd, accessed November 28, 2023.

NV5. 2021. Phase I Environmental Site Assessment Report. September 30, 2021.

Land Use

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.

City of Long Beach. 2019. December 3, 2019. Long Beach 2040. Map Page 19. https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/land-use-maps/lb2040_mapbook_page_19.

City of Long Beach. 2021. June 30, 2021. City of Long Beach Use District Map: Page 14. https://www.longbeach.gov/globalassets/lbcd/media-library/documents/planning/maps/zoning-maps/zoning_map_book_color_page_14

City of Long Beach. 2023. Land Use District Map. https://www.longbeach.gov/lbcd/planning/advance/maps/land-use-district-maps2/.

City of Long Beach. 2023. Zoning Map. https://www.longbeach.gov/lbcd/planning/advance/maps/zoning/.

Minerals

CDC (California Department of Conservation, Division of Mines and Geology). 2022. CGS Information Warehouse: Mineral Land Classification, https://maps.conservation.ca.gov/cgs /informationwarehouse/mlc/, accessed September 14, 2022.

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.

City of Long Beach. 1973. Conservation Element, https://www.longbeach.gov/globalassets/lbcd /media-library/documents/planning/advance/general-plan/1973-conservation-element.

County of Los Angeles. 2015. Los Angeles County General Plan 2035, Figure 9.6, Mineral Resources.

Noise

ASHRAE (America Society of Heating, Refrigerating and Air-Conditioning Engineers). 1999. Heating, Ventilating, and Air-Conditioning Applications.

Caltrans (California Department of Transportation). 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol, September.

Caltrans. 2013b. Transportation and Construction Vibration Guidance Manual, September.

Caltrans. 2013b. Transportation and Construction Vibration Guidance Manual, September.

City of Carson. Carson 2040 General Plan. Carson 2040 General Plan Update, 2023.

City of Carson Municipal Code, Article 5, Chapter 5, Noise Control Ordinance. https://www.codepublishing.com/CA/Carson/html/Carson05/Carson050500.html, accessed November 2023.

City of Long Beach Municipal Code, Title 8. Health and Safety, Chapter 8.80. Noise. CHAPTER 8.80 - NOISE | Municipal Code | Long Beach, CA | Municode Library

City of Long Beach, Bureau of Environmental Health, Noise Control Program. Noise Control Program (longbeach.gov), accessed November 2023.

City of Long Beach General Plan Update, Draft Noise Element, 2019.

Office of Planning and Research. 2017. General Plan Guidelines.

Population and Housing

SCAG (Southern California Association of Governments). 2020. Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, Demographics and Growth Forecast, May.

Public Services

City of Carson. 2023. City of Carson 2040 General Plan, https://www.carson2040.com/. Adopted April 4, 2023.

Transportation

City of Carson. 2013. Carson Master Plan of Bikeways, August 2013.

Los Angeles Metropolitan Transportation Authority (Metro). 2016. Active Transportation Strategic Plan, April 2016.

Utilities and Service Systems

California Department of Resources Recycling and Recovery (CalRecycle). 2019a. SWIS Facility/Site Activity Details - El Sobrante Landfill, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, accessed January 12, 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2019b. SWIS Facility/Site Activity Details - Lancaster Landfill and Recycling Center, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3571?siteID=103, accessed January 12, 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2019c. SWIS Facility/Site Activity Details - Simi Valley Landfill & Recycling Center, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/608?siteID=3954, accessed January 12, 2023.

California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan Dominguez District. June 2021, https://www.calwater.com/docs/uwmp2020/DOM_2020_UWMP_FINAL.pdf, accessed January 11, 2023.

County of Los Angeles. 2021. *2020 Annual Report – Los Angeles County Countywide Integrated Waste Management Plan*, October 2021.

Wildfire

CAL FIRE (California Department of Forestry and Fire Protection). 2022. FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/, accessed November 18, 2022.

City of Carson. 2023. City of Carson 2040 General Plan. https://www.carson2040.com/. Adopted April 4, 2023.

CHAPTER 6
Introduction to the Response to Comments

The Response to Comments was prepared to respond to comments that were received on the Public Review Draft IS/MND. The Final Initial Study/Mitigated Negative Declaration (Final IS/MND) consists of the Public Review Draft IS/MND and the Response to Comments (Chapter 6, *Introduction to the Response to Comments*, Chapter 7, *Commenters and Response to Comments,* and Chapter 8, *Errata*). The Final IS/MND has been prepared in accordance with CEQA as amended (Public Resources Code Sec. 21000 et seq.) and CEQA Guidelines (California Administrative Code Section 15000 et seq.). Documents relating to this Final IS/MND were cited and incorporated. All documents are available for review at the City of Carson Community Development Department located at 701 East Carson Street, Carson, CA 90745, and at https:/ https://ci.carson.ca.us/CommunityDevelopment/planningprojects.aspx.

6.1 CEQA Requirements

Before the City may approve the Project, it must certify that the Final IS/MND: (a) has been completed in compliance with CEQA; (b) was presented to the City Council who reviewed and considered it prior to approval of the Project; and (c) reflects the City's independent judgement and analysis (CEQA Guidelines Sec. 15074(b)).

CEQA Guidelines Sec. 15074 states that prior to approving a project, the decision-making body of the lead agency shall consider the proposed mitigated negative declaration together with any comments received during the public review process. Therefore, the decision-making body will be considering the following documents that constitute the Final IS/MND prior to making a decision on the Project:

- The Public Review Draft IS/MND;
- The Response to Comments which includes:
  - Comments and recommendations received on the Public Review Draft IS/MND;
  - A list of persons, organizations, and public agencies commenting on the Public Review Draft IS/MND; and
  - The response of the Lead Agency to significant environmental points raised in the review and consultation process.

The Response to Comments for the Project presents the following chapters:

- **Chapter 6: Introduction to the Response to Comments** – this chapter includes an introduction to the Response to Comments and the CEQA process and requirements; and

- **Chapter 7: Commenters and Response to Comments** – this chapter includes the persons, organizations, and public agencies commenting on the Public Review Draft IS/MND; the written comments received on the Public Review Draft IS/MND; and the written responses to each comment identified.
- **Chapter 8**: **Errata** – this chapter includes any revisions made to the Public Review Draft IS/MND in response to comments received or initiated by the Lead Agency.

6.2 CEQA Process

6.2.1 Public Participation Process

Notice of Intent of the Public Review Draft IS/MND

The Notice of Intent (NOI) of the Public Review Draft IS/MND was posted on Tuesday, April 16, 2024, with the City Clerk and the State Clearinghouse. The Public Review Draft IS/MND was circulated for a 30-day public review until Thursday, May 16, 2024. A 30-day public review period was provided in accordance with CEQA Guidelines Sec. 15105(b). The Public Review Draft IS/MND was circulated to state and local agencies and interested parties requesting a copy of the Public Review Draft IS/MND. The Public Review Draft IS/MND was made available to the public City of Carson Community Development Department located at 701 East Carson Street, Carson, CA 90745, and at https:/ https://ci.carson.ca.us/CommunityDevelopment/planningprojects.aspx.

6.2.2 Evaluation and Response to Comments

In accordance with Article 6 of the CEQA Guidelines, the City of Carson, as the Lead Agency, was required to evaluate substantive environmental comments received on the Public Review Draft IS/MND. The Response to Comments provides written responses to each comment received on the Public Review Draft IS/MND.

6.2.3 Final IS/MND Approval

As Lead Agency, the City is required to determine the adequacy of the Final IS/MND (Public Review Draft IS/MND and Response to Comments). The City can adopt the Final IS/MND if they find on the basis of the whole record before it (including the Public Review Draft IS/MND and Response to Comments) that there is no substantial evidence that the Project will have a significant effect on the environment and that the Final IS/MND reflects the City's independent judgment and analysis.

6.2.4 Notice of Determination

Pursuant to CEQA Guidelines Sec. 15094, the City will file a Notice of Determination (NOD) with the City Clerk and the Office of Planning and Research, State Clearinghouse, within five working days of project approval.

6.3 Summary of Response to Comments Findings

This Response to Comments includes an Errata (Chapter 8) to clarify, amplify and expand on the full adequate analysis and significance conclusions that were already set forth in the Public Review Draft IS/MND. CEQA Guidelines Sec. 15073.5 makes clear a IS/MND needs to be recirculated if the IS/MND was substantially revised after the public notice of availability of the MND. CEQA Sec. 15073.5(b) states that a substantial revision means:

- A new, avoidable significant effect is identified, and mitigation measures or project revisions must be added in order to reduce the effect to insignificance, or
- The lead agency determines that the proposed mitigation measures or project revisions will not reduce potential effects to less than significant and new measures or revisions must be required.

As set forth in more detail in the Response to Comments, none of the responses set forth herein change the significance conclusions presented in the Public Review Draft IS/MND or substantially alters the analysis presented for public review. Furthermore, the Public Review Draft IS/MND circulated for public review was fully adequate under CEQA such that meaningful public review was not precluded. Thus, the clarifications provided in the Response to Comments does not constitute significant new information that might trigger recirculation.

This page intentionally left blank

CHAPTER 7
Commenters and Response to Comments

The Public Review Draft IS/MND for the Project was circulated for public review for 30 days (April 16, 2024, through May 16, 2024). The City received two comment letters from the State of California Department of Fish and Wildlife dated May 13, 2024 and the County of Los Angeles Fire Department, dated May 16, 2024. The comment letters were assigned an alphabetical designation (A and B). Each comment within the letter was assigned a numerical designation so that each comment could be cross-referenced with an individual response. Following are the two comment letters and written responses to each of the comments that were received during the public review period of the Public Review Draft IS/MND.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

May 13, 2024

McKina Alexander
City of Carson
701 E. Carson St
Carson, CA 90745
Email: malexander@carsonca.gov

Subject: Mitigated Negative Declaration for Avocet Energy Storage System Project, SCH #2024040695, City of Carson, Los Angeles County

Dear McKina Alexander:

The California Department of Fish and Wildlife (CDFW) has reviewed the Mitigated Negative Declaration (MND) for the Avocet Energy Storage System Project (Project) proposed by the City of Carson (City). Supporting documentation for the Project includes the *Biological Constraints Analysis Memorandum* dated December 9, 2022, and the *Biological Resources Technical Memorandum* dated November 14, 2023. CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and may be subject to CDFW's regulatory authority under the Fish and Game Code. A-1

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources. A-2

CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G.

Code, § 1900 et seq.), CDFW recommends the City obtain appropriate authorization under the Fish and Game Code. A-2 (cont.)

Project Summary

Project Applicant: Avocet Energy Storage, LLC.

Objective: The proposed Project includes the development of an approximately 200-megawatt battery energy storage system within the Project site. The proposed Project would consist of lithium-ion batteries (or similar technology available at the time of construction) installed in racks, inverters, medium-voltage transformers, switchgear, a collector substation, and other associated equipment to interconnect into the Southern California Edison (SCE) Hinson Substation. A generation transmission line (gen-tie line) would interconnect the proposed Project to the existing SCE Hinson Substation. The overhead portion of the gen-tie line will span from the Project site to the east for approximately 0.45-mile, crossing over Dominguez Channel and the Union Pacific Railroad to the transition point. Two approximately 175-foot-tall transmission poles would be required for the overhead portion. At the transition point, up to three transition poles (approximately 175 feet in height) may be built and the gen-tie line would transition underground.

Location: The Project is located on a 6.96-acre site at 23320 Alameda Street in the City of Carson. The proposed gen-tie route would cross three jurisdictions including: the City of Carson, the City of Los Angeles, and the City of Long Beach. The Project site is located in the eastern portion of the City of Carson, east of South Alameda Street and north of East Sepulveda Boulevard. The Project site is approximately 0.95 miles south of Interstate 405 and is bordered by Alameda Street to the west, industrial uses to the north and south, and the Dominguez Channel to the east. The SCE Hinson Substation or point of interconnection is located approximately 0.62 miles to the northeast in the City of Long Beach. A-3

Biological Setting: The Project site is in an area characterized by a mix of industrial uses and is currently developed as an aggregate recycling center. Non-native grasses and forbs occur along the banks of Dominguez Channel and within the eastern portion of the study area within the transmission line easement. This community is characterized by disturbance both historic (i.e., excavation and grading) and ongoing (i.e., regular mowing activities). It supports a dense herbaceous layer primarily comprised of non-native grasses and forbs such as brome grass (*Bromus* sp.), short-podded mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola sp*.). Isolated occurrences of non-native tree tobacco (*Nicotiana glauc*a) occur along the banks of Dominguez Channel as well. Overall wildlife diversity and abundance in the study area is low, and no sensitive species have been recorded in the study area. The Project site is fully developed and surrounded by industrial land use with scattered ornamental landscaping. Local wildlife may use the Project site as a travel corridor.

Comments and Recommendations

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

Comment #1: Impacts to Streams

Issue: Project activities may impact the Dominguez Channel.

Specific impacts: On page 17, the *Biological Resources Technical Memorandum* states, "[i]nstallation of the gen-tie line will not result in a discharge of dredged or fill material to the Dominguez Channel as the poles for the overhead transmission line will be installed outside of the channel. Therefore, the project will not be subject to the regulatory jurisdiction of the […] California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600 et seq. of the California Fish and Game Code (FGC) […]." The installation of the gen-tie line is proposed to occur on the bank of the channel, which may be subject to Fish and Game Code, section 1600. A-4

Why impacts would occur: According to Fish and Game Code, section 1600 et seq., substantial changes to the bank of a channel may require notification to CDFW prior to beginning these activities.

Installation activities may cause erosion, soil compaction, increased sediment aggradation downstream, and may result in loss of vegetation communities. Additionally, Project implementation may directly affect water quality downstream. The MND does not indicate that an LSA Agreement notification will be submitted; therefore, it has not been determined that an LSA Agreement will be required for this Project. As a result, the Project could result in unmitigated impacts to streams and associated habitats. A-5

Evidence impacts would be significant: CDFW exercises its regulatory authority as provided by Fish and Game Code, section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. Fish and Game Code, section 1602 requires any person, State or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following: A-6

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

CDFW requires an LSA Agreement when a Project activity may substantially adversely affect fish and wildlife resources. The Project may result in significant impacts on streams and associated natural communities if development would be in close proximity to these resources. Without appropriate mitigation, the Project continues to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on fish and wildlife resources, including rivers, streams, or lakes and associated natural communities identified by CDFW. A-6 (cont.)

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: The Project Applicant shall notify CDFW pursuant to Fish and Game Code, section 1602 and may need to obtain an LSA Agreement from CDFW prior to obtaining a grading permit. The Project Applicant shall comply with the mitigation measures detailed in an LSA Agreement issued by CDFW. The Project Applicant shall also provide compensatory mitigation for any impacted stream and associated natural community. Please visit CDFW's Lake and Streambed Alteration Program webpage for more information (CDFW 2024a). A-7

Recommendation #1: CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency/Project Applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 et seq. and/or under CEQA, a project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation; enhancement or restoration; and/or protection and management of mitigation lands in perpetuity. A-8

Additional Recommendations

Recommendation #2: The MND provides mitigation for nesting birds; however, language in the Project's mitigation measure for nesting birds may not fully mitigate impacts to nesting birds in and around the Project site. CDFW recommends the City revise Mitigation Measure BIO-1 by adding underlined language and removing the language with a strikethrough: A-9

> "If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within ~~30~~ 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be

avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations."

A-9 (cont.)

Recommendation #3: Rodenticides and second-generation anticoagulant rodenticides should be prohibited during the life of the Project.

A-10

Recommendation #4: CDFW recommends that any fencing used during and after the Project be constructed with materials that are not harmful to wildlife. Prohibited materials should include, but are not limited to, spikes, glass, razors, or barbed wire. Use of chain link and steel stake fence should be avoided or minimized as this type of fencing can injure wildlife or create barriers to wildlife dispersal. All hollow posts and pipes should be capped to prevent wildlife entrapment and mortality. These structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the Project site should be plugged with bolts or other plugging materials to avoid this hazard. Fences should not have any slack that may cause wildlife entanglement.

A-11

Mitigation and Monitoring Reporting Plan

CDFW recommends the City adopting the mitigation measures and recommendations in this letter into the MND. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments [(Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15126.4(a)(2)]. As such, CDFW has provided comments and recommendations to assist the City in developing mitigation measures that are (1) consistent with CEQA Guidelines, section 15126.4; (2) specific; (3) detailed (i.e., responsible party, timing, specific actions, location), and (4) clear for a measure to be fully enforceable and implemented successfully via mitigation, monitoring, and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

A-12

The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code, section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment 1).

Environmental Data

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make

A-13

subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, sub. (e)) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online (CDFW 2024b). Please visit CDFW online to access the types of information reported to CNDDB. A-13

Environmental Document Filing Fees

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

Conclusion

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts on biological resources. To ensure significant impacts are adequately mitigated to a level less-than-significant, the feasible mitigation measures described above should be incorporated as enforceable conditions in the MND for the Project. CDFW requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. A-15

Questions regarding this letter or further coordination should be directed to Felicia Silva, Senior Environmental Scientist (Specialist), by email at Felicia.Silva@wildlife.ca.gov or by phone at (562) 292-8105 to schedule a meeting with CDFW.

Sincerely,

DocuSigned by:
Heather A. Pert
DF423498814B441...

Heather A. Pert
Environmental Program Manager
South Coast Region

Attachments

Attachment A Draft Mitigation and Monitoring Plan

EC: California Department of Fish and Wildlife
Baron Barrera, Senior Environmental Scientist (Supervisory)
Felicia Silva, Senior Environmental Scientist (Specialist)
Cindy Hailey, Staff Services Analyst
CEQA Program Coordinator – Sacramento

Office of Planning and Research
State Clearinghouse – Email: State.Clearinghouse@opr.ca.gov

References:

[CDFW] California Department of Fish and Wildlife. 2024a. Lake and Streambed Alteration Program.
[CDFW] California Department of Fish and Wildlife. 2024b. Submitting Data to the CNDDB.

Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into the Project's environmental document.

Biological Resources (BIO)

Name	Mitigation Measure (MM) or Recommendation (REC)	Timing	Responsible Party
MM-BIO-1-LSA Notification	The Project Applicant will notify CDFW pursuant to Fish and Game Code, section 1602 and may need to obtain an LSA Agreement from CDFW prior to obtaining a grading permit. The Project Applicant shall comply with the mitigation measures detailed in an LSA Agreement issued by CDFW. The Project Applicant shall also provide compensatory mitigation for any impacted stream and associated natural community. Please visit CDFW's Lake and Streambed Alteration Program webpage for more information (CDFW 2024a).	Prior to issuance of development permit	City of Caron (City)/Project Applicant
REC-1-CEQA Compliance	CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency/Project Applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 et seq. and/or under CEQA, a project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation; enhancement or restoration; and/or protection and management of mitigation lands in perpetuity.	Prior to issuance of development permit	City/Project Applicant
REC-2-Nesting Birds	The MND provides mitigation for nesting birds; however, language in the Project's mitigation measure for nesting birds may not fully mitigate impacts to nesting birds in and around the Project site.	Prior to issuance of	City/Project Applicant

	CDFW recommends the City revise Mitigation Measure BIO-1 by adding underlined language and removing the language with a strikethrough: "If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within ~~30~~ 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations."	development permit	
REC-3-Rodenticides	Rodenticides and second-generation anticoagulant rodenticides shall be prohibited during the life of the Project.	Prior to finalizing CEQA document	City/Project Applicant
REC-4-Wildlife fencing	CDFW recommends that any fencing used during and after the Project be constructed with materials that are not harmful to wildlife. Prohibited materials shall include, but are not limited to, spikes, glass, razor, or barbed wire. Use of chain link and steel stake fence shall be avoided or minimized as this type of fencing can injure wildlife or create barriers to wildlife dispersal. All hollow posts and pipes shall be capped to prevent wildlife entrapment and mortality. These structures mimic the natural cavities preferred by	Prior to finalizing CEQA document	City/Project Applicant

	various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the Project site shall be plugged with bolts or other plugging materials to avoid this hazard. Fences shall not have any slack that may cause wildlife entanglement.		

7.1 Responses

7.1.1 Response to Comment Letter A: California Department of Fish and Wildlife – May 13, 2024

Response to Comment A-1

The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment A-2

The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment A-3

The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment A-4

The statement made on page 3 of CDFW's letter ("The installation of the gen-tie line is proposed to occur on the bank of the channel, which may be subject to Fish and Game Code, section 1600.") is incorrect. The proposed gen-tie line would occur as an overhead transmission line crossing the Dominguez Channel supported by poles to be constructed in uplands outside of the banks of the channel. The pole locations will be sited approximately 40 to 70 feet outside of the concrete bed and bank of the channel within previously disturbed areas. There will be no equipment or materials within the bed and/or bank of the Dominguez Channel during construction or operations of the Project. Temporary vegetation removal may occur for installation and fire management; however, this will be outside the limits of riparian vegetation. As such, the Project will not impact any aquatic and/or riparian species or communities subject to California FGC Section 1600 et. seq.

Response to Comment A-5

As stated on page 17 of the Biological Resources Technical Memorandum (**Appendix C**), installation of the gen-tie line will not result in a discharge of dredged or fill material to the Dominguez Channel as the poles for the overhead transmission line will be installed outside of the channel. Furthermore, on page 18, the Biological Resources Technical Memorandum includes avoidance and minimization measures for aquatic resources (AMM-2) to address any potential indirect effects on aquatic resources. These measures have been included as Mitigation Measure BIO-2 in Chapter 4, *Mitigation Monitoring and Reporting Program*, of the Public Review Draft IS/MND.

Response to Comment A-6

Please see Response to Comment A-4. Furthermore, as explained in the Biological Resources Technical Memorandum (**Appendix C**), the Project activity would not substantially adversely

affect fish or wildlife resources. The Project would not result in significant impacts on streams and associated natural communities.

Response to Comment A-7

As stated in the Biological Resources Technical Memorandum (**Appendix C**), installation of the gen-tie line would not result in a discharge of dredged or fill material to the Dominguez Channel as the poles for the overhead transmission line will be installed outside of the channel. Therefore, the Project will not be subject to the regulatory jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600 et seq. of the California Fish and Game Code (FGC). Therefore, a Lake and Streambed Alteration Agreement per Section 1600 of the FGC is not required for the Project.

Response to Comment A-8

As stated in Response to Comment A-7, a Lake and Streambed Alteration Agreement per Section 1600 of the FGC is not required for the Project.

Response to Comment A-9

CDFW's recommended revisions to Mitigation Measure BIO-1 have been incorporated into Mitigation Measure BIO-1 as shown below and included in Chapter 8, *Errata*.[7]

Mitigation Measure BIO-1: Nesting Birds/Raptors. If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within ~~30~~ 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.

Response to Comment A-10

CDFW's recommendation #3 states: “Rodenticides and second-generation anticoagulant rodenticides should be prohibited during the life of the Project.” However, as explained in the Biological Resources Technical Memorandum (**Appendix C**) and the Biological Constraints Analysis (**Appendix B**), no special-status plant or wildlife species were observed during the biological reconnaissance or surveys. Special status rodent species are not expected to occur within the Project area. Therefore, prohibiting rodenticides and second-generation anticoagulant rodenticides for the life of the Project is not appropriate.

[7] Please note, the correction to Mitigation Measure BIO-1 is also corrected in Chapter 4, Mitigation Monitoring and Reporting Program, Table 18, Mitigation Monitoring and Reporting Program for the City of Carson Avocet Energy Storage Project, page 4-2.

Response to Comment A-11

The project site would be fully enclosed to prevent access by the public in accordance with the Federal Energy Regulatory Commission (FERC) standards. Fences would be installed around the perimeter of the project site for safety and security purposes. A wrought iron fence and 34-foot wide sliding gate would be installed along the Project frontage on South Alameda Street. The remainder of the project site would be fully enclosed with a chain link fence. All fencing would remain in place for the life of the Project.

According to the Biological Resources Technical Memorandum (**Appendix C**), the study area is located within an urban environment surrounded by development and does not support any native habitat. There are minimal parks or natural habitats in the adjacent areas; thus, limiting the amount of wildlife that would migrate through the area. Additionally, the study area is not within any wildlife corridors or habitat blocks designated by the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2021), Griffith Park Area Habitat Linkage Planning Map (SMMC 2017), or the South Coast Missing Linkage report (SC Wildlands 2006). Urban adapted species of birds, reptiles, invertebrates, and small mammals that are tolerant of anthropogenic disturbance in Los Angeles may occur in the area. Additionally, large mammals such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the area for hunting and movement. While the eastern portion of the study area provides some refuge for wildlife, the noise and disturbance within the surrounding area provides low quality habitat for wildlife. In addition, disturbance on the project site caused by the existing concrete recycling facility further impedes any potential wildlife movement. Implementation of the Project would not result in further impediments to wildlife movement when compared to the existing condition. For these reasons, CDFW's recommendation regarding fencing is not appropriate.

Response to Comment A-12

The City appreciates CDFW providing its recommended mitigation measures and has incorporated these in the Final IS/MND to the extent appropriate and practicable as explained in the above Response to Comments A-9, 10 and 11.

Response to Comment A-13

No special status species or natural communities were detected during Project surveys; therefore, the City has no relevant information to submit to CNDDB for the Project.

Response to Comment A-14

The Applicant team will pay the applicable fees upon filing the Notice of Determination which serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final.

Response to Comment A-15

The City appreciates CDFW providing its recommended mitigation measures and has incorporated these in the Final IS/MND to the extent appropriate and practicable as explained in the above Responses to Comments A-9, 10 and 11.

Letter B

COUNTY OF LOS ANGELES FIRE DEPARTMENT

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

ANTHONY C. MARRONE
FIRE CHIEF
FORESTER & FIRE WARDEN

"Proud Protectors of Life, the Environment, and Property"

May 16, 2024

Alexander McKina
Planning Division
701 E. Main Street
Carson, CA 90745

Dear Mr. McKina:

THE NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION, "AVOCET ENERGY STORAGE PROJECT", PROPOSES A 6.96 ACRE SITE DEVELOPMENT OF APPROXIMATELY 200-MEGAWATT BATTERY ENERGY STORAGE SYSTEM, CITY OF CARSON, FFER2024002059

The Notice of Intent to Adopt a Mitigated Negative Declaration Report reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. B-1

The following are their comments:

PLANNING DIVISION:

We have no comments. B-2

For any questions regarding this response, please contact Kien Chin, Planning Analyst, at (323) 881-2404 or Kien.Chin@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

The development of this project shall comply with all applicable code and ordinance requirements for construction, access, water main, fire flow and fire hydrants and Chapter 12 of the County of Los Angeles Fire Code requirements. B-3

The Land Development Unit appreciates the opportunity to comment on this project. Should any questions arise, please contact Nancy Rodeheffer at (323) 890-4244 or Nancy.Rodeheffer@fire.lacounty.gov. B-3 (cont.)

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. B-4

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

For any questions regarding this response, please contact Forestry Assistant, Matthew Ermino at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments for the project at this time. B-5

Please contact HHMD Hazardous Materials Specialist III, Jennifer Levenson at (323) 890-4114 or Jennifer.Levenson@fire.lacounty.gov if you have any questions.

Very truly yours,

RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:pg

7.1.2 Response to Comment Letter B: County of Los Angeles Fire Department – May 16, 2024

Response to Comment B-1

The comment states the Notice of Intent to Adopt a Mitigated Negative Declaration Report was reviewed by the Planning Division, Land Development Unit, Forestry Division, and the Health Hazardous Materials Division of the County of Los Angeles Fire Department. The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment B-2

The comment states the Planning Division has no comments. The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment B-3

The comment states that the Project shall comply with all applicable codes and ordinance requirements for construction, access, water main, fire flow and fire hydrants and Chapter 12 of the County of Los Angeles Fire Code requirements. The Project would comply with all applicable codes and ordinance requirements of the County of Los Angeles Fire Department as stated in *Section XV,* Public Services.

Response to Comment B-4

The comment states the Forestry Division has no comments. The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

Response to Comment B-5

The comment states the Health Hazardous Materials Division has no comments. The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents of the Public Review Draft IS/MND.

CHAPTER 8
Errata

The following text changes are made to the Public Review Draft IS/MND and incorporated as part of the Final IS/MND which constitutes the Public Review Draft IS/MND and this Response to Comments (Chapter 6, *Introduction to the Response to Comments*, Chapter 7, *Commenters and Response to Comments*, and Chapter 8, *Errata*). Changes to the text are noted with double underline (for added text) or ~~strikeout~~ (for deleted text). None of the corrections, clarifications, and additions to the Public Review Draft IS/MND constitutes new significant information as defined in Section 15073.5 of the CEQA Guidelines. Therefore, a recirculation of the Public Review Draft IS/MND is not required.

The corrections, clarifications and additions to the Public Review Draft IS/MND are based on comments received on the Public Review Draft IS/MND as well as additional revisions identified by the City of Carson to ensure there was clarity in the discussions in the Public Review Draft IS/MND.

Section IV, Biological Resources

Mitigation Measure BIO-2[8]

Page 3-24

Mitigation Measure BIO-1: Nesting Birds/Raptors. If work activities occur within the avian nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird and raptor survey within ~~30~~ 14 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of suitable nesting habitat. If an active nest is found, the nest should be avoided, and a suitable buffer zone delineated in the field where no impacts would occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are generally 300 feet for non-listed passerines and 500 feet for listed avian species and raptors; however, avoidance buffers may be reduced for non-listed species or increased for listed species at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.

[8] Please note, the correction to Mitigation Measure BIO-1 is also corrected in Chapter 4, Mitigation Monitoring and Reporting Program, Table 18, Mitigation Monitoring and Reporting Program for the City of Carson Avocet Energy Storage Project, page 4-2.

This page intentionally left blank