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STACK SVY03A DATA CENTER CAMPUS

Initial Study/Mitigated Negative Declaration



CALIFORNIA
ENERGY
COMMISSION
Gavin Newsom,
Governor

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Initial Study/ Mitigated Negative Declaration

STACK SVY03A Data Center Campus

(23-SPPE-01)

Lead Agency

California Energy Commission



March 2025

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Section 1

Draft Mitigated Negative Declaration



Draft Mitigated Negative Declaration

STACK SVY03A Data Center Campus

Docket number: 23-SPPE-01

1.0 Draft Mitigated Negative Declaration

1.1 Project Description

Project: STACK SVY03A Data Center Campus
26062 Eden Landing Road
Hayward, California 94545

Applicant: STACK Infrastructure
700 Broadway, Suite 1750
Denver, CO 80290

STACK Infrastructure (STACK or applicant) is proposing to construct and operate the SVY03A Data Center Campus (SVY03A Campus) located in the city of Hayward. The SVY03A Campus would include a new three-story data center building (SVY03A); a security building (SVY03B); backup generators to support the SVY03A data center building (SVY03ABGF); an on-site project substation, a Pacific Gas and Electric Company (PG&E) switching station, and an on-site transmission line. The SVY03A Campus would also include new site and infrastructure improvements consisting of new access driveways located at Eden Landing Road and Production Avenue, internal circulation improvements, parking, a loading dock, stormwater basins, landscaping, utilities, water tank, and a perimeter security fence. The SVY03ABGF would be an emergency backup generating facility with a generation capacity of up to 67.2 megawatts (MW) to support the need for the SVY03A to provide uninterruptible power supply for tenant's servers. The backup generators would be run for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. The SVY03ABGF would only serve the SVY03A Campus and its components.

The CEC is responsible for reviewing, and ultimately approving or denying, all thermal electric power plants, 50 megawatts (MW) and greater, proposed for construction in California. The Small Power Plant Exemption (SPPE) process allows applicants with projects between 50 and 100 MW to obtain an exemption

from the CEC's jurisdiction and proceed with local approval rather than requiring certification by the CEC. STACK Infrastructure filed an application on September 14, 2023, requesting a SPPE for the STACK SVY03A Data Center Campus project. The CEC can grant an exemption if it finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. Section 25519(c) of the Public Resources Code designates the CEC as the California Environmental Quality Act (CEQA) lead agency, as provided in section 21165 of the Public Resources Code, for all projects that seek an exemption from the CEC's power plant certification process.

1.2 Introduction

Pursuant to the California Environmental Quality Act (CEQA), the Energy Commission prepared an Initial Study (IS) for the proposed project to determine if any significant adverse effects on the environment would result from project implementation. The IS utilizes the environmental checklist outlined in Appendix G of the CEQA Guidelines. If an IS for a project indicates that a significant adverse impact could occur, a public agency shall prepare an Environmental Impact Report.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA Guidelines, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- b) *The initial study identifies potentially significant effects, but:*
 - 1) *Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - 2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

1.3 Environmental Determination

The IS was prepared to identify the potential environmental effects resulting from proposed project implementation, and to evaluate the level of significance of these effects. The IS is based on information from the applicant's SPPE

application including revised project description and associated submittals, data requests and responses, and additional staff research.

Based on the analysis in the IS, it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. See the respective technical area for the full text of the mitigation measures.

Therefore, adoption of a Mitigated Negative Declaration (MND) would satisfy the requirements of CEQA. The project's mitigation measures included are designed to reduce or eliminate the potentially significant environmental impacts. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA Guidelines.

Section 2

Introduction

2 Introduction

2.1 Small Power Plant Exemption (SPPE)

STACK Infrastructure (applicant) is seeking a Small Power Plant Exemption (SPPE) from the California Energy Commission (CEC). The CEC has the exclusive authority to certify all thermal power plants (50 megawatts [MW] and greater), and related facilities proposed for construction in California. The SPPE process allows applicants with facilities not exceeding 100 MW to obtain an exemption from CEC's jurisdiction and proceed with local permitting rather than requiring the CEC's certification. The CEC can grant an exemption if it finds that the proposed facility would not create a substantial impact on the environment or energy resources.

Public Resources Code section 25519(c) designates the CEC as the lead agency, in accordance with California Environmental Quality Act (CEQA), for all facilities seeking an SPPE. As the lead agency pursuant to CEQA, the CEC is responsible for the preparation of this Initial Study. The CEC will use this Initial Study in support of its discretionary decision to grant or deny the small power plant exemption application. Per CEQA Guidelines Section 15070 (Cal. Code Regs., tit. 14, § 15070), a negative declaration or mitigated negative declaration shall be prepared for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

If the exemption is granted, the Initial Study/Mitigated Negative Declaration is expected to be used by the city of Hayward in its consideration of permitting the project as well as by the Bay Area Air Quality Management District for its issuance of various air quality permits. Upon exempting the project, the CEC would have no permitting authority over the project and would not be responsible for any mitigation or permit conditions imposed by the city of Hayward or other agencies.

2.2 CEQA Project Definition

According to CEQA Guidelines Section 15378 (Cal. Code Regs., tit. 14, § 15378), a "project" means the whole of an action, which has a potential for resulting in either a

direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

1. An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700.
2. An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
3. An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

The term “project” refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term “project” does not mean each separate governmental approval (Cal. Code Regs., tit. 14, § 15378(c)).

The CEC SPPE’s determination is limited to the back-up generating facilities (SVY03ABGF) for the proposed data center campus. Nonetheless, this initial study evaluates the whole data center project (construction and operation) to inform the public and decision makers on the potential environmental impacts of the whole action.

2.3 Organization of this Initial Study

The environmental analysis of this SPPE takes the form of an Initial Study (IS), which was prepared to conform to the requirements of CEQA (Pub. Resources Code, § 21000 et seq.), the CEQA Guidelines (Cal. Code Regs, tit. 14, § 15000 et. seq.), and the CEC’s regulations and policies. The IS is based on information from the applicant’s SPPE application and associated submittals, site visits, data requests and responses, and additional staff research and agency consultation.

This IS evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction and operation of the project. Staff’s analysis is broken down into issue areas derived from Appendix G to the CEQA Guidelines:

- | | |
|---------------------------------------|--------------------------|
| - Aesthetics | - Land Use and Planning |
| - Agricultural and Forestry Resources | - Mineral Resources |
| - Air Quality | - Noise |
| - Biological Resources | - Population and Housing |
| - Cultural and Tribal Resources | - Public Services |

- Energy
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

In addition, CEC's CEQA analysis documents include an analysis of Environmental Justice. For each subject area, the analysis includes a description of the existing conditions and setting related to the subject area, an analysis of the proposed project's potential environmental impacts, and a discussion of mitigation measure, if necessary, to reduce potentially significant impacts to less than significant levels.

Section 3

Initial Study

3.0 Initial Study

3.1 Project Title

STACK SVY03A Data Center Campus (23-SPPE-01)

3.2 Lead Agency Name and Address

California Energy Commission
715 P Street
Sacramento, California 95814

3.3 Lead Agency Contact Person and Phone Number

Renee Longman, Project Manager
Siting, Transmission, and Environmental Protection Division
California Energy Commission
(916) 937-3538

3.4 Project Sponsor's Name and Address

STACK Infrastructure
1700 Broadway, Suite 1750
Denver, CO 80290

3.5 General Plan Designation

City of Hayward General Plan. The project site has a General Plan land use designation of "Industrial Technology and Innovation Corridor," or IC, under the *Hayward 2040 General Plan* (General Plan) (COH 2024a).

3.6 Zoning

City of Hayward Zoning Code. The City of Hayward zoning designation for the project site is "Industrial Park," or IP (COH 2024a).

3.7 Project Location and Surrounding Land Uses

The project site is located at 26062 Eden Landing Road in the city of Hayward, Alameda County, California. The project site is approximately 11.3 acres and consists of two contiguous parcels (APNs 461-0085-016-00, 461-0085-052-01) bounded by Eden Landing Road on the north, Production Avenue on the east, and Investment Boulevard on the south, and a developed parcel on the west. **Figure 3-1** shows the regional location; **Figure 3-2** identifies the project vicinity; and **Figure 3-3** is an aerial photo and surrounding land uses.

The site is currently developed as the Eden Landing Business Park and consists of nine existing one-story buildings with a total combined square footage of approximately 167,471 square feet (DayZenLLC 2024I). Surrounding land uses include manufacturing, biotech, contractor services, offices, and other types of industrial uses to the south, east, and west. A thin strip mall with food and personal service uses is located directly to the north, between the site and Highway 92 (COH 2024b).

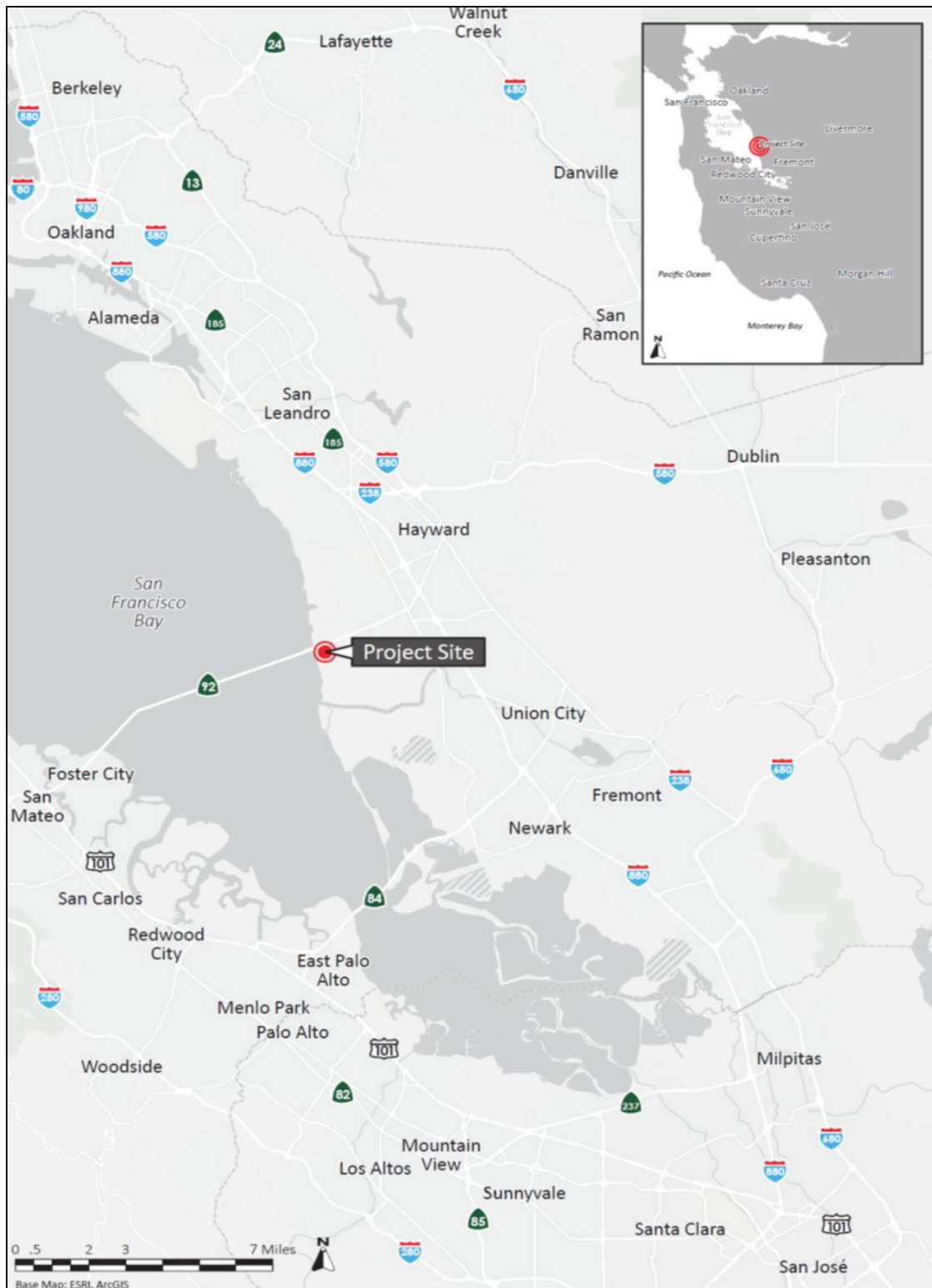


Figure 3-1 Regional Location

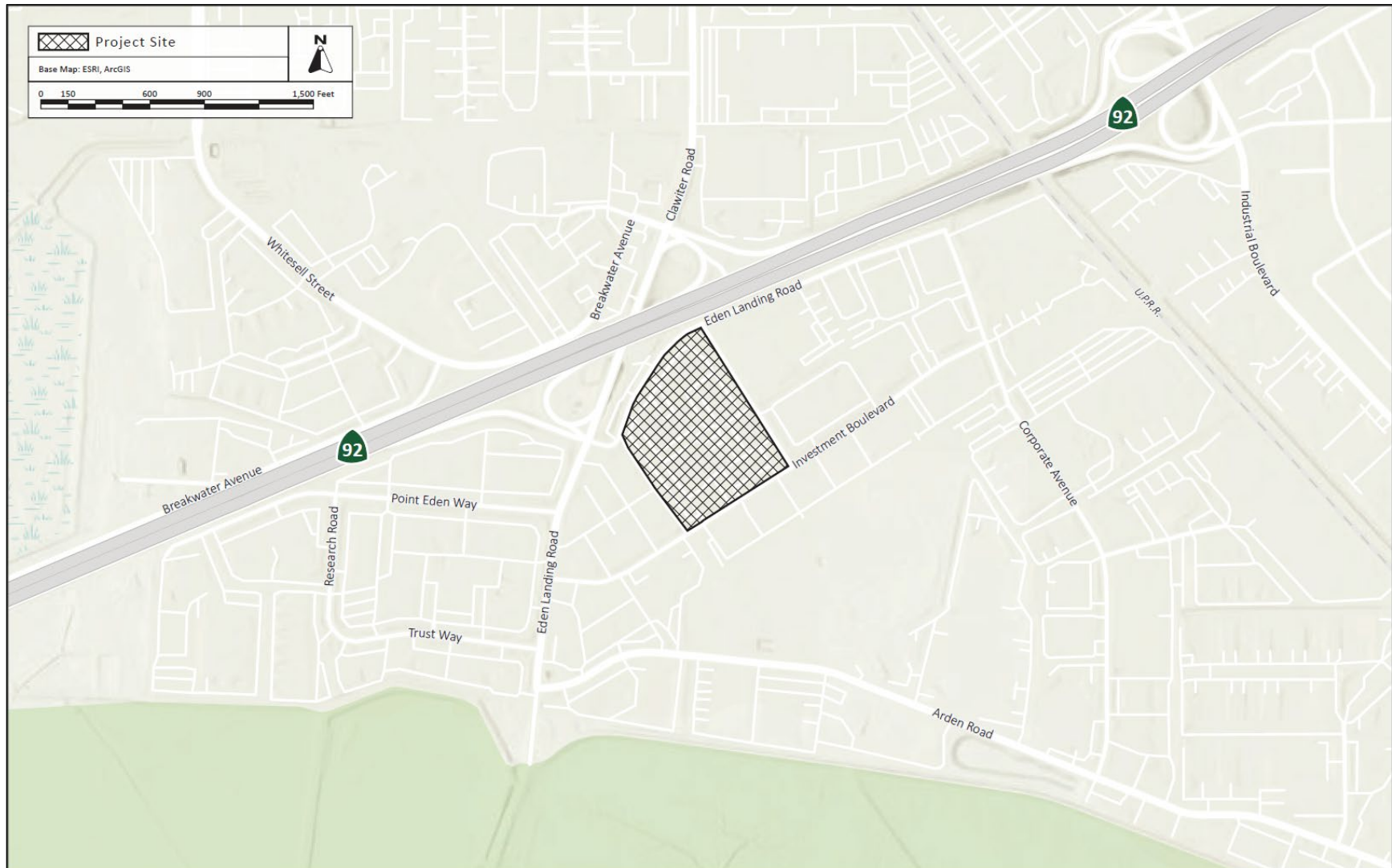


Figure 3-2 Project Vicinity



Figure 3-3 Aerial Photo and Surrounding Land Uses

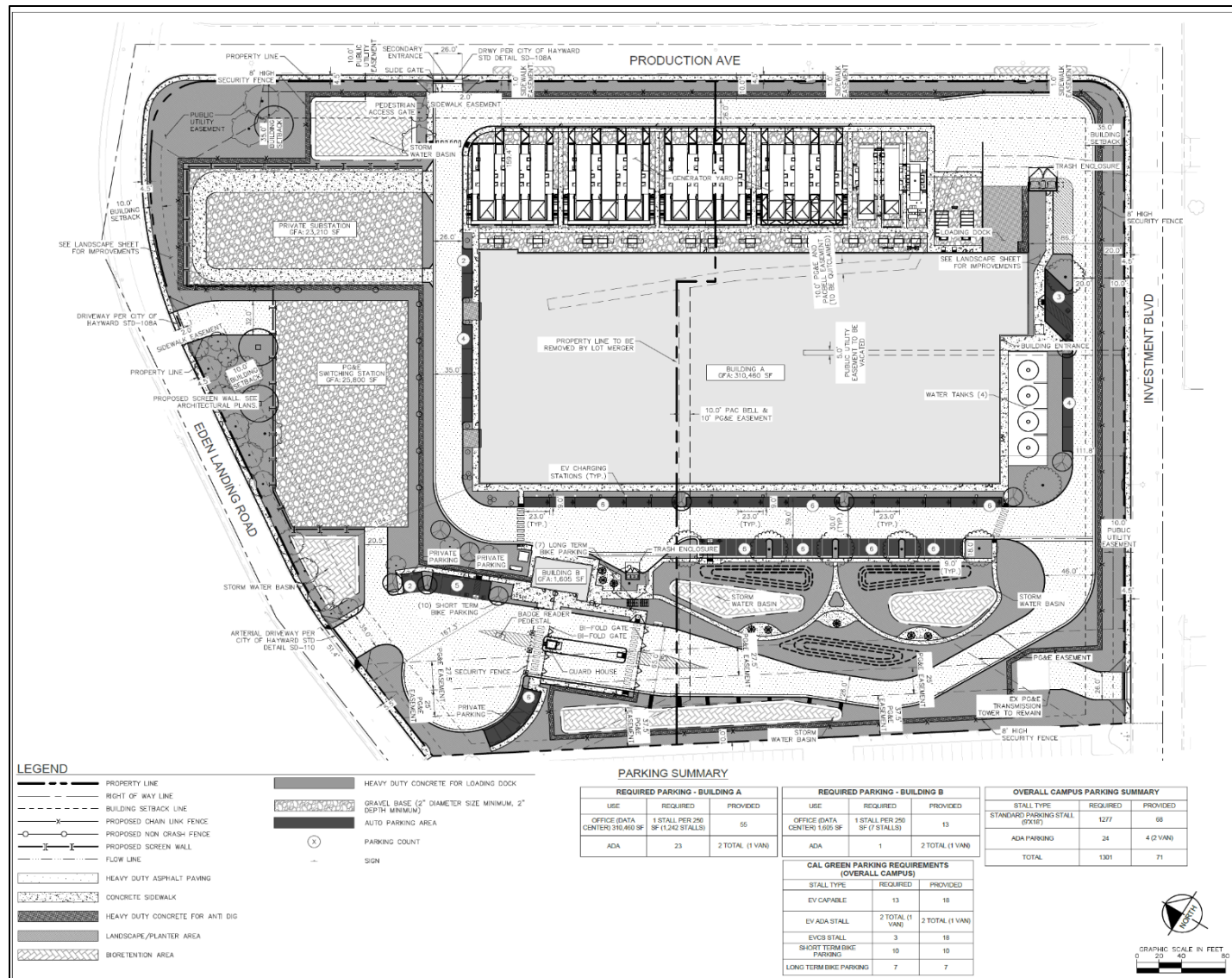


Figure 3-4 Preliminary Site Plan



Figure 3-5 Project Elevations

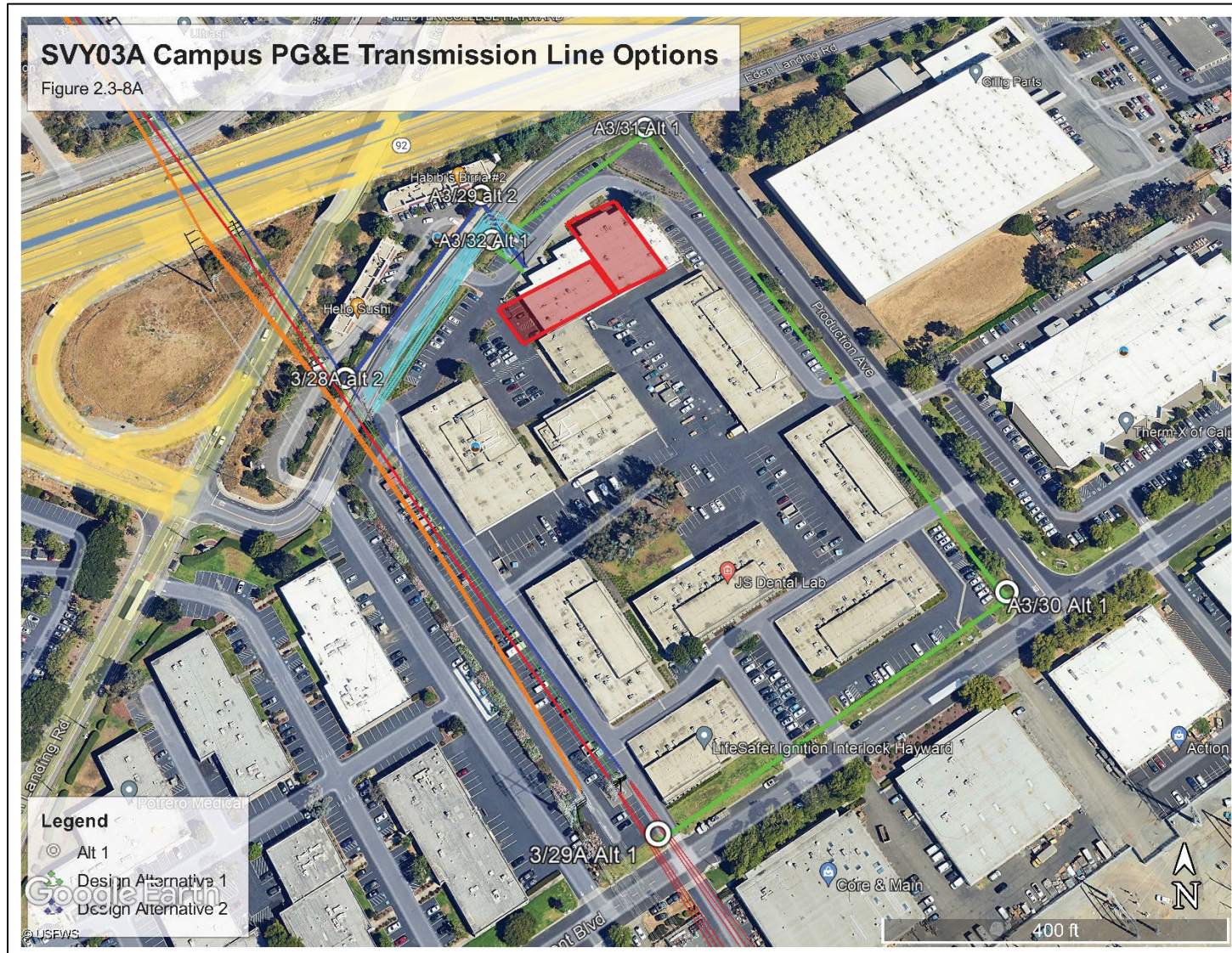


Figure 3-6 SVY03A Campus PG&E Transmission Line Options

3.8 Project Description

The following project description is from the STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024 (DayZen 2024I).

Project Overview

STACK Infrastructure (STACK or applicant) is proposing to construct and operate the SVY03A Data Center Campus (SVY03A Campus) located in the city of Hayward. The SVY03A Campus would include a new three-story data center building designated on plans as "Building A" (SVY03A); a security building designated on the plans as "Building SVY03B"; backup generators to support the SVY03A data center building (SVY03ABGF); an on-site project substation, a Pacific Gas and Electric Company (PG&E) switching station, and an on-site transmission line. The SVY03A Campus would also include new site and infrastructure improvements consisting of new access driveways located at Eden Landing Road and Production Avenue, internal circulation improvements, parking, a loading dock, stormwater basins, landscaping, utilities, water tank, and a perimeter security fence. Please refer to **Figure 3-4** Preliminary Site Plan and **Figure 3-5** Project Elevations.

The SVY03ABGF would be an emergency backup generating facility with a generation capacity of up to 67.2 megawatts (MW) to support the need for the SVY03A to provide uninterruptible power supply for tenant's servers. The SVY03ABGF would consist of a total of twenty-eight (28) emergency generators arranged in two locations. The (26) 2.75 MW and the single 1 MW generators would serve the SVY03A data center building and would be located in a generator yard immediately adjacent to the east side of the SVY03A building and the single 175 kilowatt (kW) generator would serve the security building (SVY03B) that would be located immediately adjacent to the north side of the SVY03B. All the generators would be dedicated to replacing the electricity needs of the SVY03A Campus in case of a loss of utility power (with redundancy). The backup generators would be run for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. The SVY03ABGF would only serve the SVY03A Campus and its components.

Of the 2.75 MW generators, twenty-four (24) would be installed in a stacked configuration. Each stacked pair of generators would be supported by an 11,000-gallon diesel fuel tank at the base of the stacking structure with a 500-gallon diesel fuel tank installed within the upper generator package. Each stacked pair of generators would be supported by a main diesel exhaust fluid (DEF) tank installed below the lower generator. The generators packages and tanks would be enclosed in acoustical enclosures. Two of the 2.75 MW generators that support the SVY03A would not be stacked and would be installed at grade and would be supported by independent fuel and DEF tanks inside each generator enclosure. These generators would each have fuel tanks with capacities of 5,000 gallons. The 1 MW generator that also supports the SVY03A would be installed at grade and would have an independent fuel tank with a

capacity of 1,000 gallons. The single 175 kW generator that supports SVY03B would have an integrated fuel tank with a capacity of 356 gallons. The total diesel fuel capacity for the site would be 149,356 gallons.

SVY03A Data Center Building

The SVY03A building would be a three-story building encompassing approximately 310,460 square feet. The data center building would house computer servers for private clients in a secure and environmentally controlled structure and would be designed to provide 67.2 MW of power to support the electrical consumption and cooling needs of information technology (Critical IT) equipment.

The structure would be architecturally treated to fit the surrounding context of the site. Mechanical equipment for the building's cooling would be housed inside the building along with exhaust baffles for exiting hot air. Electrical and backup battery equipment rooms would be housed inside the building. The data center is being designed with an average rack power rating of 8 kW.

The data center building is composed of administrative, data hall, electrical and mechanical support spaces and loading dock masses. The maximum building height would be approximately 94 feet measured to the top of the main structure, 100 feet measured to the top of the building parapet, and 108 feet measured to the top of the small penthouse.

Building Cooling System

Data Hall Cooling

Fan wall-style data hall Air Handling Units (DAHUs) would be the sole cooling source for the IT spaces in the building. The DAHUs would be installed in dedicated mechanical galleries along opposing sides of the IT space, and they would draw in outside air through sidewall louvers at the building's perimeter. These DAHUs would be capable of supplying up to 100 percent outdoor air economization for data center cooling and, when necessary, the DAHUs use direct evaporative media to lower the temperature of the outside air down to the set-point determined by the control system. The mechanical galleries would be separated from the IT space by two interstitial "common supply air headers" running the length of the mechanical gallery and IT space.

This SVY03A would use a "flooded room" cooling design, meaning that it would use no ductwork or raised flooring systems to direct the cooling air to the IT racks' air intakes. Instead, all the DAHUs in a given mechanical gallery discharge their cooling air into the adjacent common supply air header, and, in turn, the common supply air header allows a "flood" of cooling air into the IT space through a number of supply air dampers in the wall separating the supply air header from the IT space. These supply air dampers include both controlled, modulating sections and fixed, open sections which allows the

cooling system to modulate cooling supplied in different areas while still maintaining a certain minimum airflow in all areas.

Data hall pressurization requirements would be maintained using rooftop exhaust fans (EFs). These fans modulate in unison to maintain space pressure throughout the control area uniformly. During part load conditions, fans stage off as necessary to maintain minimum fan airflow requirements.

Electrical Room Cooling

The SVY03A would utilize multiple ductless split system direct expansion heat pumps in the electrical room. The heat gain in these rooms would be minimal compared to the data center load, as there are no large transformers in the electrical rooms. This design requires three heat pumps in typical electrical rooms, and two units in catcher rooms.

Office Cooling

The data center office area would utilize a variable air volume (VAV) system. The VAV system is broken up into two separate systems, each with multiple VAV boxes. This would provide cooling redundancy for the house electrical room. The ventilation requirements for the space are met via applicable ventilation codes and is distributed with the central air handling system. The central air handlers have outside air intakes integral with the equipment.

Security Building SVY03B

The security building, SVY03B, would be located in the northwest corner of the campus and at the location of the security gate. The building would be approximately 1,605 square feet and would involve typical concrete masonry unit (CMU) construction. The height of the roof of the building will be approximately 15 feet and 18 feet to the top of masonry.

Backup Generating Facility (SVY03ABGF)

Generating Capacity

In order to determine the generating capacity of the SVY03ABGF, it is important to consider and incorporate the following critical and determinative facts.

1. The SVY03ABGF would use internal combustion engines and not turbines.
2. The SVY03ABGF would be controlled exclusively by the SVY03A and SVY03B through software technology and electronic devices.
3. The SVY03ABGF has been designed to deliver up to 67.2 MW during an emergency on the hottest design day.
4. The SVY03ABGF includes two completely redundant generators.

5. The SVY03ABGF would only be operated for maintenance, testing and during emergency utility power outages.
6. The SVY03ABGF would only operate at a load equal to the demand by the SVY03A Campus during an emergency utility outage.
7. The SVY03ABGF would not be interconnected to the electric transmission grid.

Generating Capacity and Power Usage Effectiveness

Based on the methodology adopted by the CEC's Final Decisions granting SPPEs for data center backup generating facilities, the maximum generating capacity of the SVY03ABGF is determined by the maximum of capacity of the load being served.

The design demand of the SVY03A Campus, which the SVY03ABGF has been designed to reliably supply with redundant components during an emergency, is based on the maximum critical IT load and maximum mechanical cooling electrical load occurring during the hottest hour in the last 20 years. Such conditions are possible but extremely unlikely to ever occur. The combined SVY03A and SVY03B total load on that worst-case day would be 67.2 MW.

Power Usage Effectiveness, or PUE, is a metric used to compare the efficiency of facilities that house computer servers. PUE is defined as the ratio of total facility energy use to Information Technology (IT) (i.e., server) power draw (e.g., $PUE = \text{Total Facility Source Energy} / \text{IT Source Energy}$). For example, a PUE of two (2), means that the data center or laboratory must draw two (2) watts of electricity for every one (1) watt of power consumed by the IT/server equipment. It is equal to the total energy consumption of a data center (for all fuels) divided by the energy consumption used for the IT equipment. The ideal PUE is one (1) where all power drawn by the facility goes to the IT infrastructure. For a worst-case day, where the maximum critical IT load and maximum mechanical cooling electrical load occur during the hottest hour, the peak PUE for the SVY03A Campus would be 1.28. Such conditions to cause this PUE are possible but extremely unlikely to ever occur. The average PUE for the SVY03A Campus would be 1.15. Based on industry surveys, the average PUE for data centers is 1.67, although newly constructed data centers typically have PUEs ranging from 1.1 to 1.4.

Backup Electrical System Design

Overview

To place the role of the SVY03ABGF into context, the following information about the overall SVY03A design is provided. The design objective of the backup electrical system is to provide sufficient equipment and redundancy to ensure that the servers housed in the SVY03A buildings would never be without electricity to support critical loads. The critical loads include the load to support the building operation in addition to the electricity consumed by the servers themselves. The largest of these non-server building loads is to provide cooling for the server rooms.

For backup supply for a data center, it is commonplace to build levels of systems and equipment redundancy and concurrent maintainability into the overall electrical and mechanical infrastructure. The base quantity of systems that are required to serve the design load of the facility is referred to as "N". When reliability requirements dictate that redundant systems are added to the base quantity of systems, it is commonplace in the industry to refer to the number of redundant systems as "X" in the representation "N+X".

Each electrical system would consist of an Uninterruptible Power Supply (UPS) system that would be supported by batteries and a means for automatic switching between UPS and normal power. The UPS system that would be deployed at the SVY03A Campus to provide backup to the IT loads would consist of two power shelves within each individual rack. Each rack power shelf would consist of 6 N+1 3kW automatic transfer switching power supply units (ATSPSUs) and lithium-ion battery backup units (BBUs). The BBUs are designed to deliver 15 kW of power.

The UPS systems provided for all non-IT loads would consist of a 100 kW rated UPS system provided with the house power service for emergency backup to the fire suppression system and electrical and mechanical controls in office spaces, and 20 kW rated UPS systems provided with each electrical lineup for emergency backup to the electrical and mechanical controls for IT, electrical, and mechanical rooms. For the 1 MW house power generator, one 100 kW UPS systems is provided. A similar 20 kW rated UPS system would be deployed for the Site Security building.

Uninterruptible Power Supply System and Batteries

The UPS System and Batteries are part of the SVY03A Campus and are not part of the SVY03ABGF. The load would be automatically transferred to the bypass line without interruption in the event of an internal UPS malfunction. The UPS would operate in the following modes:

- Normal Conditions (Double Conversion, IGBT): Load is supplied with power flowing from the normal power input terminals, through the rectifier-charger and inverter, with the battery connected in parallel with the rectifier-charger output.
- Normal Conditions (Delta conversion): The output inverter and input (Delta) converter shall operate in an on-line manner to continuously regulate power to the critical load. The input power converter and output inverter shall be capable of full battery recharge while simultaneously providing regulated power to the load for all line and load conditions within the range of the UPS specifications.
- Abnormal Supply Conditions: If normal supply deviates from specified and adjustable voltage, voltage waveform, or frequency limits, the battery supplies energy to maintain constant, regulated inverter power output to the load without switching or disturbance.

- **Power Failure:** If normal power fails, energy supplied by the battery through the inverter continues to supply-regulated power to the load without switching or disturbance.

When power is restored at the normal supply terminals of the system, controls shall automatically synchronize the inverter with the external source before transferring the load. The rectifier-charger shall supply power to the load through the inverter and simultaneously recharge the battery. If the battery becomes discharged and normal supply is available, the rectifier-charger shall charge the battery. The rectifier-charger shall automatically shift to float-charge mode on reaching full charge.

If any element of the UPS system fails and power is available at the normal supply terminals of the system, the static bypass transfer switch shall switch the load to the normal ac supply circuit without disturbance or interruption.

Should overloads persist past the time limitations, the automatic static transfer switch shall switch the load to the bypass output of the UPS. When the fault has cleared, the static bypass transfer switch shall return the load to the UPS system.

If the battery is disconnected, the UPS shall supply power to the load from the normal supply with no degradation of its regulation of voltage and frequency of the output bus.

Batteries

The batteries would be lithium-ion and supplied by Samsung, or Toshiba. The batteries would be provided in a one string configuration within a cabinet with each UPS. Batteries would have a minimum design life of approximately 12 years in float applications at 64.4 to 82.4 degrees Fahrenheit. Lithium-ion batteries report cell properties to the UPS, which is monitored by Emergency Power Management System (EPMS) for statuses and alarming.

The batteries would be configured in banks with matching standalone batteries with the following characteristics:

- a. Each battery bank would provide a minimum of 12 minutes of backup at 100 - percent full load UPS current, between 64 and 82 degrees Fahrenheit, 3 end volts per cell, beginning of life.
- b. Internal cabinet temperature sensor to be wired back to the UPS module.
- c. Battery type is Lithium Manganese Oxide / Nickel Manganese Cobalt Oxide mix (LMO/NMC)

Generator System Description

Each of the (26) 2.75 MW generators for the SVY03A would be Caterpillar Model 3516E (Cat 3516E) standby emergency diesel fired generators equipped with selective catalytic reduction (SCR) equipment and diesel particulate filters (DPF) to comply with Tier 4

emissions standards. The maximum peak generating capacity of each generator is 2.75 MW for standby applications (short duration operation). Under normal operation, due to the block redundant configuration, the maximum load on each generator is designed to be less than 100 percent of the peak capacity.

The 1 MW generator for the SVY03ADC1 would be Caterpillar Model C32 (Cat C32) standby emergency diesel fired generators equipped with SCR equipment and DPF to comply with Tier 4 emissions standards. The maximum peak generating capacity of this generator is 1 MW for standby applications (short duration operation).

The 175-kW generator for the security building would be Caterpillar Model D175 GC standby emergency diesel fired generator meeting Tier III emission standards.

Each individual generator would be provided with its own packaging system. Within that package, the prime mover and alternator would be automatically turned on and off by a utility-generator programming logic controller (PLC) transfer controller located in the 480-volt main switchboard located within the SVY03A. Each generator would be controlled by a separate, independent transfer controller. The generator would be turned on if the electrical utility power becomes unavailable and would be turned off after utility power has been restored and the transfer controller has returned the utility to the active source of power serving the computer and mechanical loads within the SVY03A.

For the SVY03A, each stacked pair of Cat 3516E generators would have an integrated dedicated base 11,000-gallon fuel tank and urea tank within the generator enclosure. The upper generator would have a 500-gallon day fuel tank. The upper generators would be supported by a structural steel platform and the lower generators would be supported by concrete pads. The generators enclosures are approximately 13 feet wide, 65-1/2 feet long and the full stacked height is 31-1/2 feet high. Each generator would have a stack height of approximately 90 feet above grade. The generators at both levels would have approximately 10 feet of clearance between adjacent generators. Two of the Cat 3516E generators would be at grade.

The SVY03A would also be supported by the smaller Cat C32 generator installed at grade and adjacent to the two Cat 3516E unstacked generators. The Cat C32 enclosure would be approximately 5.5 feet wide, 13.7 feet long, and 7.1 feet high. The generator would have a stack height of approximately 90 feet above grade.

The SVY03B building would be supported solely by the 175 kW Cat D175 GC. The enclosure would be approximately 4 1/2 feet wide, 9 feet long, and 5 feet tall. The generator would have a stack height of approximately 9 feet above grade.

Each of the 2.75 MW generators for the SVY03A would be connected to an individual lineup consisting of a Main Switch Board, where two of the generators/lineups are redundant. Each non-redundant lineup feeds a maximum of 1,808 kW of critical IT load. All 26 generators and lineups are interconnected at the Main Switch Board level for the

SVY03A, therefore should any one lineup fail, either of the two redundant lineups would have enough capacity to completely pick up the dropped load. During a utility outage, all non-redundant generators would start and be connected to their dedicated loads. If no more than 2 of the generator systems fail during the utility outage, the total maximum load of approximately 67.2 MW would be supported by the generators and will only be running at about 80 percent of the full capacity of the generators.

Fuel System

The backup generators would use renewable diesel as its primary fuel or ultra-low sulfur diesel as secondary fuel (less than 15 parts per million sulfur by weight) in the event of supply challenges or disruption in obtaining renewable diesel.

Hazardous Materials Management

STACK would prepare a Spill Prevention, Control and Countermeasure Plan (SPCC) to address the storage, use and delivery of diesel fuel for the generators. Each generator unit and its integrated fuel tanks would be designed with double walls. The interstitial space between the walls of each tanks would be continuously monitored electronically for the existence of liquids. This monitoring system is electronically linked to an audible and visual alarm system that alerts personnel if a leak is detected. Additionally, the standby generator units and integrated tank would be housed within a self-sheltering enclosure that prevents the intrusion of storm water.

Diesel fuel would be delivered on an as-needed basis in a compartmentalized tanker truck. The tanker truck parks at the gated entrances to the generator yard for re-fueling. There would be no loading/unloading racks or containment for re-fueling events. However, a spill catch basin would be located at each fill port for the generators. To prevent a release from entering the storm drain system, drains would be blocked off by the truck driver and/or facility staff during fueling events. Rubber pads or similar devices would be kept in the generation yard to allow quick blockage of the storm sewer drains during fueling events.

To the extent feasible, fueling operations would be scheduled at times when storm events are improbable. Warning signs and/or wheel chocks would be used in the loading and/or unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines. An emergency pump shut-off would be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures would be available at the offices.

DEF, which contains urea, would be used as part of the diesel engine combustion process to meet the emissions requirements. The DEF would be stored in the tanks located within the generator enclosures. These tanks could be filled in place from other drums, totes, or bulk tanker truck at the tank top.

SVY03ABGF Facility Operation

The backup generators would be run for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. Bay Area Air Quality Management District's (BAAQMD's) Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). Please see **Table 3-1** for a description of the testing and maintenance frequencies and loading proposed for the generators that comprise the SVY03ABGF.

TABLE 3-1 GENERATOR PLANNED MAINTENANCE AND TESTING EVENTS

Event	Frequency	Maximum Duration (min)	Maximum Number of Generators Tested Concurrently	Maximum Number of Generators Tested per Day	Typical Load Range
Readiness Testing	Monthly	30	1	10	40%
Generator Maintenance and Testing	Annual	120	1	8	25% for 30 min 50% for 30 min 100% for 1 hour

Project Substation, PG&E Switchyard, and Transmission Line

The SVY03A Campus would construct a new 75 MVA (mega volt-ampere) electrical substation along the western boundary of the site (project substation). The two-bay gas insulated substation (GIS) (two 75 MVA 115 kV-34.5 kV step-down transformers and primary distribution switchgear) would be designed to allow one of the two transformers to be taken out of service, effectively providing 75 MVA of total power (a 2-to-make-1 design).

The project would include a new PG&E switchyard, which would be built in a Breaker and a Half (BAAH) configuration. This would consist of a bundled double-circuit (2-way) 115 kV power line connecting to a BAAH configuration consisting of approximately six 115 kV circuit breakers, steel structures, 115 kV switches, metering devices, and a non-occupied control enclosure. The PG&E switchyard and the project substation would not use Sulfur Hexafluoride (SF6) unless the short circuit current rating is greater than 63 kA to align with CARB requirements.

The project substation and PG&E switchyard will have crushed rock surface with an aggregate base. A mineral oil containment pit surrounding each transformer would capture unintended oil leaks. Access to the PG&E switchyard would be from Eden Landing Road.

The project substation and PG&E switchyard would be capable of delivering electricity to the SVY03A Campus from the new PG&E 115 kV transmission line circuit but would not allow any electricity generated from the SVY03ABGF to be delivered to the transmission grid. Availability of substation control systems would be ensured through a redundant DC battery backup system.

To serve the SVY03A Campus, PG&E would be constructing a “looped” (2-way) transmission line from the existing transmission line adjacent to the project. The project has identified three optional routes that this looped transmission line could take from PG&E’s existing transmission line to the new PG&E switchyard. See Figure 3-6, SVY03A Campus PG&E Transmission Line Options. The first option would involve building a new above-ground approximately 300 foot long, double circuit transmission line interconnection (bundled single-circuit each way, looped into and out of the PG&E Switchyard) supported by approximately two new tubular steel poles (TSPs). One new approximately 80-foot-tall TSP would be interset mid-span between two existing steel towers on PG&E’s Grant-Eastshore #1 & #2 115 kV double-circuit transmission line that runs along the west side of the project area. An approximately 70-foot-tall TSP would be installed on the north side of the project area. In addition, one or two approximately 35-foot-tall take-down structures would be installed immediately outside of the PG&E Switchyard. This option is identified as “Alt 1” on Figure 3-6.

The second optional route (shown as Design Alternative 1 on Figure 3-6) would involve building a new above-ground, approximately 1,800-foot-long double-circuit transmission line interconnection (single-circuit each way, looped into and out of the PG&E switchyard). The transmission line would be supported by approximately four to five new TSPs ranging in height from 70 feet to 120 feet. From one new approximately 80-foot-tall TSP to be interset mid-span on PG&E’s Grant-Eastshore #1 & #2 115 kV double-circuit transmission line, the new transmission line would run east on the south side of Eden Landing Road, then south on the west side of Production Avenue, and then west on the north side of Investment Boulevard. One or two approximately 35-foot-tall take-down structures would be installed immediately outside of the new PG&E Switchyard.

The third optional route (shown as Design Alternative 2 on Figure 3-6). would involve building a new above-ground, approximately 300-foot-long double-circuit transmission line interconnection (single-circuit each way, looped into and out of the PG&E Switchyard). The transmission line would be supported by approximately two new TSPs ranging in height between 70 feet and 120 feet. From one new approximately 80-foot-tall TSP to be interset mid-span on PG&E’s Grant-Eastshore #1 & #2 115 kV double-circuit transmission line, the new transmission line would be run east along the north side of Eden Landing Road, and then to one or two approximately 35-foot-tall take-down structures installed immediately outside of the PG&E switchyard. The details of the transmission line interconnection are subject to change with final design and conditions on the ground.

Site Access and Parking

The existing curb locations would largely remain unchanged, though eight current driveways would be removed and replaced with four new ones. These new driveways would be located as follows: (1) on Eden Landing Road, approximately 115 feet east of the southwest corner of the site; (2) on Eden Landing Road, approximately 220 feet south of the northwest corner of the site; (3) on Production Avenue, approximately 260 feet east of the northwest corner of the site; and (4) on Investment Boulevard at the south corner of the site for PG&E maintenance worker access to the existing transmission tower. Site access control measures include automatic vehicle gates at Driveways 1 and 3, while Driveway 2 would be secured by a screen wall. Driveway 4 does not appear to have any gate or screen wall restricting access. Adequate sight distance is provided for all four driveways.

The four driveways would serve different vehicle types, as follows:

- **Driveway 1 – Eden Landing Road:** Serves as the primary site access for vehicles, trucks, bicycles, and pedestrians. It provides entry to a pullout area with access to visitor parking spaces and the main security checkpoint. Anticipated truck usage includes WB-62 trucks, front-loading collection trucks, and pumper fire trucks.
- **Driveway 2 – Eden Landing Road:** Provides PG&E access to the private substation and serves as an emergency vehicle entrance. Vehicles would enter the site via this driveway then circle the substation and exit the site via Driveway 1. Trucks using this driveway include WB-62 trucks and pumper fire trucks.
- **Driveway 3 – Production Boulevard:** Dedicated to emergency vehicle access, restricted to pumper fire trucks.
- **Driveway 4 – Investment Boulevard:** Dedicated to PG&E vehicle access to an on-site transmission tower and line located within an PG&E easement, anticipated truck usage includes WB-62 trucks.

The site would provide 71 vehicle parking spaces, of which 18 would be EV and 4 would be accessible spaces (2 large enough for vans). The site would also include 10 short-term and 7 long-term bicycle parking spaces.

Utility Connections

As part of the construction of the new buildings, domestic water, fire water, sanitary sewer, and fiber connections would be made from the city infrastructure systems located along Eden Landing Road, Production Avenue, and Investment Boulevard. There is a 12-inch diameter domestic water line located in Eden Landing Road that connects to an 8-inch diameter domestic water line in Production Avenue. Both water lines are operated by the City of Hayward. The 12-inch domestic water line located in Eden Landing Road would serve as the primary source for potable water, building cooling, and fire supply to the project. The fire supply loop would also connect to the 8-inch domestic water line located in Production Avenue. The project's sanitary

connection would tie to an existing 8-inch sanitary sewer that is located in Investment Boulevard along the project frontage.

Water Storage

The SVY03A Building would use potable water for cooling within the DAHUs (as described above under "Building Cooling System") during hotter times of the year. To accommodate the peak demand of water use during those times, the project would include four 62,000-gallon storage tanks. Each tank would be constructed with steel bolted panels and would be approximately up to 19 feet in diameter and up to 42 feet high.

The use of the evaporative cooling system in the SVY03A building would result in approximately 2.8 AFY (approximately 50,000 gallons per day (GPD) during peak use) of wastewater discharge to the existing city of Hayward wastewater system.

Water Supply and Water Use

Site Grading and Construction

Grading and construction of the SVY03A Campus is estimated to utilize approximately 1.75-acre feet of water over the 22-month construction period.

Campus Operations

Operation of the SVY03A Campus would require the approximate amounts of potable water as shown by use in **Table 3-2** below.

TABLE 3-2 POTABLE WATER AND WASTEWATER DEMAND

SVY03A Campus- Water Use

	Peak 24-hour Period (gallons)	Yearly Total (gallons)	Yearly Total (AFY)	Daily Average (gallons)
Industrial Water (IW)	168,400	1,467,200	4.50	4,020
Potable Water	975	355,875	1.09	975
Landscape	3,340	1,182,648	3.63	3,240
TOTAL	172,615	3,005,723	9.22	8,235
SVY03A IW Storage Tank Capacity (total, 4 tanks)		172,000	gallons	
SVY03A IW Storage Tank Capacity (per tank)		43,000	gallons	

SVY03A - Wastewater

	Peak 24-hour Period (gallons)	Yearly Total (gallons)	Yearly Total (AFY)	Daily Average (gallons)
Industrial Wastewater (IWW)	56,800	580,200	1.78	1,590

SVY03A - Wastewater

	Peak 24-hour Period (gallons)	Yearly Total (gallons)	Yearly Total (AFY)	Daily Average (gallons)
Sewer	975	355,875	1.09	975
Landscape	0	0	0	0
TOTAL	57,775	936,075	2.87	2,565

It should be noted that the estimate for landscaping water would decrease with time as the plants become established adapt to the site environment.

STACK investigated the use of recycled water to be used at the site for evaporative cooling and rejected because Hayward's recycled water is not sufficient and would require expensive treatment and the infrastructure is not close to the site.

Stormwater Basin and Stormwater Controls

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) to regulate stormwater discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). Examples of C.3 LID measures include bioretention areas, flow-through planters, and subsurface infiltration systems.

The design of the SVY03A Campus proposes to construct stormwater treatment areas consisting of LID bioretention areas totaling approximately 15,000 square feet, based on preliminary impervious calculations, sized according to the requirements of the MRP. The stormwater treatment areas would be located throughout the site, and adjacent to paved parking areas and buildings.

In the existing condition, stormwater flows within the site from north to south and discharges into the public system at two laterals south of the property along Investment Blvd. The project would maintain the existing drainage patterns and would capture flow in catch basins along the drive aisles and will be conveyed through storm drainpipe into the bioretention areas on-site. Downspouts for the roof drainage would be piped under sidewalks and discharged to the bioretention areas. Bioretention areas would include perforated underdrains and overflow structures that connect to the on-site storm drains system which would eventually discharge to the public storm system in Investment Blvd.

According to Appendix I, Hydromodification Susceptibility Map, of the “C.3 Stormwater Technical Guidance” published by the Alameda Countywide Clean Water Program the project site is located in a “solid gray area”, defined as streams or channels that are tidally influenced or depositional in their outfall to San Francisco Bay. According to the MRP, hydromodification controls (HMC) are not required for projects located in solid gray areas of the Hydromodification Susceptibility Map. Therefore, the SVY03A Campus would not incorporate HMC into the project’s development.

Landscaping

The project proposes to remove 50 existing trees on-site due to various conflicts with proposed civil and architectural improvements. Forty-seven (47) on-site trees are proposed to be mitigated through a combination of planting new on-site trees per the city’s prescribed replacement ratios, as well as paying into the city of Hayward in-lieu fund for new trees at select locations within the city.

New landscaping consisting of trees, large and medium shrubs, and groundcovers would be installed along the property boundaries, building perimeters, stormwater treatment facilities, and landscape beds distributed throughout the parking facilities. Fifty-five (55) trees would be planted a minimum of five feet away from new or existing water mains or utility lines.

Project Construction

Demolition, grading, excavation, and construction is anticipated to begin in summer of 2025 with an anticipated completion date in summer of 2027; a total of approximately 22 months. The peak construction workforce is approximately 150 workers per month with an average of approximately 100 workers per month.

The proposed site grading is relatively balanced but would likely require up to 7,000 cubic yards of imported fill. Per geotechnical considerations, it is recommended that the foundation system be a combination of a matt slab with rammed aggregate piers. The maximum depth of required excavation for the matt slab will be 3-feet and the maximum depth of required excavation for the rammed aggregate piers would be approximately 20-feet (depth pending final geotechnical recommendations). For improvements at-grade that are not supported on a structural slab, the soil subgrade should be kept moist until it is covered by imported fill.

The maximum depth below existing grade for any of the drainage facilities (bioretention areas) is seven feet below existing grade. The drainage facilities for the site are spread evenly throughout the site plan. The total amount of area of drainage facilities provided for the site is approximately 15,000 square feet. The maximum extent of excavation for the drainage facilities on-site is 80,000 cubic-feet or approximately 3,000 cubic-yards.

Operational Workforce

The SVY03A Campus is anticipated to employ a total of 45 people, including security and maintenance staff. The full-time on-site facility maintenance staff would monitor and maintain the mechanical systems for the data center operation.

3.9 Other Public Agencies Whose Approval is Required

- City of Hayward
- Bay Area Air Quality Management District

3.10 Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.31?

The CEC has received one request for formal notification from a tribe that has traditional and cultural affiliation with the geographic area of the proposed project, the Wuksachi Indian Tribe/Eshom Valley Band. Additionally, consistent with the CEC's tribal consultation policy (CEC 2024), CEC staff contacted the Native American Heritage Commission (NAHC) on September 1, 2023, to request a search of the Sacred Lands File and a list of California Native American tribes that might be interested in the proposed project. The NAHC responded on October 20, 2023, and provided a list of eight California Native American tribes to contact, including the Wuksachi Indian Tribe/Eshom Valley Band. CEC staff mailed initial consultation letters to these eight tribes on March 29, 2024. These tribes included:

1. Amah Mutsun Tribal Band of Mission San Juan Bautista
2. Confederated Villages of Lisjan Nation
3. Costanoan Rumsen Carmel Tribe
4. Indian Canyon Mutsun Band of Costanoan
5. Muwekma Ohlone Indian Tribe of the SF Bay Area
6. North Valley Yokuts Tribe
7. The Ohlone Indian Tribe
8. Wuksachi Indian Tribe/Eshom Valley Band

One tribe, the Confederated Villages of Lisjan Nation, requested copies of the cultural record search, draft environmental document, NAHC response letter, and any archaeological reports prepared for the proposed project. Consultation was concluded via email on June 13, 2024. No consultation requests from other California Native American tribes were received within or after the 30-day response period. Please refer to **Section 5.5 Cultural and Tribal Cultural Resources** for additional details regarding tribal consultation.

3.11 References

- CEC 2024 – California Energy Commission (CEC). *Tribal Consultation Policy*. CEC-130-2024-001. Sacramento, CA, February 2024.
- COH 2024a – City of Hayward (COH). Hayward Web Map. Accessed on July 15, 2024. Accessed online at: <https://webmap.hayward-ca.gov/?loc=-13588507,4530849,12&lyrs=HaywardParcelBaseMap|layer0:33>
- COH 2024b – City of Hayward (COH). Attachment I Staff Report, October 10, 2024 Planning Commission Work Session Item WS 24-030. Accessed online at: <https://hayward.legistar.com/LegislationDetail.aspx?ID=6884218&GUID=F2BC543F-E535-44BB-B452-4B67E38D8A1F>
- DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024k – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024l – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

Section 4

Environmental Determination

4 Environmental Determination

4.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, with some involving at least one impact that is a "Potentially Significant Impact" and requiring implementation of mitigation as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural & Tribal Cultural Resources | <input type="checkbox"/> Energy & Energy Resources |
| <input checked="" type="checkbox"/> Geology & Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Utilities & Service Systems |
| <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

4.2 Environmental Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An

ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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



Date: March 21, 2025

Elizabeth Huber, Director
Siting, Transmission and Environmental Protection Division
California Energy Commission

Section 5

CEQA Checklist

5.1 Aesthetics

This section describes the environmental setting and regulatory background and discusses impacts pertaining to aesthetics associated with the construction and operation of the project in the existing landscape.¹

AESTHETICS				
Except as provided in Public Resources Code Section 21099 ² , would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines Appendix G, as amended December 28, 2018.

5.1.1 Environmental Setting

The project would be constructed on 11.3 acres of relatively flat land in a developed industrial dense area in the southwest area of the city of Hayward, California. To the north of the project site are State Route (SR) 92, research parks, warehouses, offices,

¹ Landscape is defined as, "The outdoor environment, natural or built, which can be directly perceived by a person visiting and using that environment. A scene is the subset of a landscape which is viewed from one location (vantage point) looking in one direction." (Hull and Revell 1989) "The term landscape clearly focuses upon the visual properties or characteristics of the environment, these include natural and man-made elements and physical and biological resources which could be identified visually; thus non-visual biological functions, cultural/historical values, wildlife and endangered species, wilderness value, opportunities for recreation activities and a large array of tastes, smells and feelings are not included." (Daniel and Vining 1983; Amir and Gidalizon 1990)

² Public Resources Code section 21099 asks is the proposed project an "employment center project" on an "infill site" within a "transit priority area" as defined in this section? A transit priority area is an area within a half-mile (2,640 feet) of a major transit stop existing or planned. Public Resources Code section 21099(d)(1) states "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." In accordance with Public Resource Code section 21099, staff has determined the project is not an employment center project on an infill site within a transit priority area. A transit priority area is an area within a half mile (2,640 feet) of a major transit stop. Staff viewed current Google Earth aerial and street view imagery and found no major transit stop in the vicinity.

the Hayward Water Pollution Control Facility, and the Russell City Energy Center (600-megawatt natural gas-fired facility). To the west are San Francisco Bay, marshes and tidelands (Baylands), and the San-Mateo-Hayward Bridge. Research parks and warehouses are to the east. Commercial and light industrial buildings, the PG&E Eastshore substation, Mt. Eden Creek, Eden Landing Ecological Reserve, and Baylands are to the south.

The project site is currently developed with the Eden Landing Business Park, consisting of nine one-story buildings totaling approximately 167,471 square feet that includes warehouse, light-industrial, and office space, parking and loading areas, sidewalks, and landscaped interior and perimeter areas. There are native and non-native trees and ornamental landscaping located along the frontage of the project site as well as the northern, western, and southern boundaries.

Regulatory Background

Federal

No federal regulations related to aesthetics apply to the project.

State

California Scenic Highway Program. The California Scenic Highway Program was established by the Legislature as Article 2.5 (commencing with section 260) of the Streets and Highways Code. The purpose of the program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment.

Section 263 of the Streets and Highways Code, the "State Scenic Highway System List" provides a list of highways that have been either officially designated or are eligible for designation as a State scenic highway.

Local

City of Hayward General Plan. The General Plan is a long-range planning document that identifies the goals and policies which will guide the physical growth of the city of Hayward. The General Plan land use designation for the project site is "Industrial Technology and Innovation Corridor (IC)." The IC designation states the following:

"The Industrial Technology and Innovation Corridor designation applies to the large crescent-shaped industrial area located along Hayward's western Urban Limit Line and southwestern city limits. Typical building types include warehouses, office buildings, research and development facilities, manufacturing plants, business parks, and corporate campus buildings. Future changes to the Industrial Technology and Innovation Corridor are expected to include building and landscaping improvements, infill development, and the redevelopment of underutilized properties. The Corridor is expected to grow as an economic and employment center and evolve to achieve a

healthy balance of traditional manufacturing and information- and technology-based uses.” (Hayward 2014, p. 3-22)

- Land Use-6.7: Design Strategies

“The City shall encourage developments within the Industrial Technology and Innovation Corridor to incorporate the following design strategies:

- Provide attractive on-site landscaping and shade trees along street frontages and within employee and visitor parking lots.
- Screen areas used for outdoor storage, processing, shipping and receiving, and other industrial operations with a combination of landscaping and decorative fences or walls.
- Encourage consistent architectural facade treatments on all sides of buildings.
- Screen roof-top equipment with roof parapets.
- Design shipping and receiving areas and driveways to accommodate the turning movements of large trucks.
- Develop coordinated and well-designed signage for tenant identification and way-finding.
- Incorporate attractive building and site lighting to prevent dark pockets on the site.
- Provide pedestrian walkways to connect building entrances to sidewalks.
- Use landscaped buffers with trees and attractive sound walls to screen adjacent residential areas and other sensitive uses.” (Hayward 2014, p. 3-57)

Natural Resources Element. The Natural Resources Element establishes goals and policies to protect and enhance the natural resources within the Hayward Planning Area. The goals and policies address a variety of topics including scenic resources.

- Goal 8. Scenic Resources

“Enhance, preserve, and increase the aesthetic qualities of Hayward’s undisturbed natural hillsides and shoreline, and designated scenic transportation corridors.” (Hayward 2014, p. 3-132)

- NR-8.3 Scenic Transportation Corridor Protection. “The City shall protect the visual characteristics of transportation corridors that are officially designated as having unique or outstanding scenic qualities, including portions of I-580, I-880, and SR 92. (Hayward 2014, p. 3-133)
- NR-8.4 Shoreline Views Protection. “The City shall maintain and implement residential and non-residential design guidelines in order to protect existing views of the Bay shoreline.” (Hayward 2014, p. 3-133)

City of Hayward Municipal Code. The city land use zoning map shows the project site within the Industrial Park (IP) zoning district.

“Industrial Park (IP). The Industrial Park (IP) Subdistrict, applies to areas with generally larger parcel sizes and uniform streetscapes, as well as areas with existing or potential industrial park development, is intended to provide areas for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere. A variety of industrial, manufacturing, and high technology uses are allowed, but this Subdistrict is more restrictive with regard to heavy industrial uses than the General Industrial Subdistrict. Warehousing and distribution uses are allowed, provided buildings and site development are designed with an office appearance from right-of-way, or with flexibility to transition to a manufacturing or research and development use. Retail and service uses that serve local employees and visitors are also permitted either as part of a larger development or as stand-alone uses on smaller sites. Development standards focus on creating and maintaining frontages that give the look and feel of integrated development, consistent with an industrial park or campus-like atmosphere.” (Hayward 2024, § 10-1.1602. B.)

Staff reviewed the following municipal code (zoning) requirements that have some relation to scenic quality. They are discussed under the subsection “4.1.2 Environmental Impacts.”

- Section 10-1.1604 – Development Standards-Industrial Subdistricts prescribes the development standards for Industrial Subdistricts. It stipulates among a list of items the following:
 - The IP zoning district maximum building height is 75 feet.
 - The IP zoning district minimum landscaping percentage of site requirement is 15 percent.
- Section 10-1.1605 – Review Procedures.
 - A. Site Plan Review. Site Plan Review, pursuant to Section 10-1.3000, Site Plan Review, is required for the following development projects and uses unless the project otherwise requires Planning Commission approval.
 1. Development of new structures greater than 5,000 square feet in size.
 2. Additions, or partial demolitions with reconstruction, adding or affecting 10 percent of the existing gross floor area and resulting in a structure greater than 5,000 square feet in size.
 3. Any site modification affecting 5,000 square feet or 10 percent of the site area, whichever is greater.
 - B. Major Site Plan Review. On sites of 10 or more acres, Major Site Plan Review, pursuant to Section 10-3075, shall be obtained prior to any subdivision or other approval for new development.

- Section 10-1.1606 – Supplemental Standards Applicable To All Properties With The Industrial Districts. The section provides among a list of standards the following applicable aesthetics related standards:
 - A. Design Guidelines. All development shall be consistent with the Industrial District Design Guidelines.
 - D. Façade Transparency at Primary Entrance. A minimum of 50 percent of the building wall area located within 20 feet of the midpoint of a primary building entrance shall be comprised of transparent windows or openings. Glass is considered transparent where it has a transparency higher than 80 percent and external reflectance of less than 15 percent.
 - 1. Exception. The building transparency at primary entrance requirement may be modified or waived where the Planning Director or other approving authority finds that the intended use has unique operational characteristics with which providing the required windows and openings is incompatible and street-facing building walls will exhibit architectural relief and/or design detail, or will be enhanced with landscaping or art, in such a way as to create visual interest.
 - I. Screening.
 - 1. Mechanical and Electrical Equipment. All exterior mechanical and electrical equipment shall be screened or incorporated into the design of buildings so as not to be visible from public rights-of-way. Equipment to be screened includes, but is not limited to, all roof-mounted equipment, air conditioners, emergency generators, heaters, utility meters, cable equipment, telephone entry boxes, backflow preventions, irrigation control valves, electrical transformers, pull boxes, and all ducting for air conditioning, heating, and blower systems. Screening materials shall be consistent with the exterior colors and materials of the building. Exceptions may be granted by the Planning Director or other approving authority where screening is infeasible due to existing development or health and safety or utility requirements.
 - J. Trash and Recycling Facilities.
 - 1. Trash and recycling facilities shall be located within an enclosure with a roof and gate. The enclosure shall be constructed of decorative wood or masonry wall or combination thereof (unless waived by the Planning Director or other approving authority) that is compatible with the design of the primary building on the site.
 - 2. Trash and recycling facilities shall be located no further than 100 feet from the use it is designed to serve, unless the site topography is such that adhering to this standard would interfere with the collection of trash.
 - M. Lighting, Exterior. Exterior lighting and parking lot lighting shall be provided in accordance with the Security Standards Ordinance (No. 90-26 C.S.) and be designed by a qualified lighting designer and erected and maintained so that

light is confined to the property and will not cast direct light or glare upon adjacent properties or public rights-of-way. Such lighting shall also be designed such that it is in keeping with the design of the development.

- N. Landscaping. Landscaping and irrigation shall be provided in accordance Chapter 10, Article 12 Bay-Friendly Water Efficient Landscaping Ordinance, and the following.
1. Landscape Areas. The following areas shall be landscaped, and may count toward the total area of site landscaping required by the zoning district regulations.
 - a. Street Frontages. Street trees shall be planted along all street frontages at a minimum of one 24-inch box tree per 20 to 40 lineal feet of frontage or fraction thereof, except where space is restricted due to existing structures or site conditions.
 - b. Required Yards. Required front, side, side street, and rear yard areas shall be landscaped, except for permitted driveways, and walkways.
 - d. Building Perimeters. Portions of buildings facing a public street shall have one or more landscaped areas with a minimum five-foot-wide landscaped area along a minimum 50 percent of the building face.
 - e. Parking Areas. See minimum parking lot landscaping and design standards in Chapter 10, Article 2, Off-Street Parking Regulations.
 - f. Other Areas. All other areas not utilized for structures or paving shall be landscaped unless otherwise authorized by the Planning Director or other approving authority because of site constraints, existing or adjacent site conditions, or phased development. (Hayward 2024)

5.1.2 Environmental Impacts

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

Neither CEQA nor the CEQA Guidelines provide a definition of what constitutes a scenic vista. As already noted, lead agencies may look to local planning thresholds for guidance when defining the visual impact standard for the purposes of CEQA.³ A general plan, specific plan, zoning, or other planning document can provide guidance. The California Energy Commission in its certification (approval) for a number of thermal power plant projects have used as the definition for a *scenic vista*, "a distant view of high pictorial quality perceived through and along a corridor or opening."⁴

³ *Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal. App. 4th 477.*

⁴ California Energy Commission Final Decision for GWF Tracy Combined Cycle Power Plant Project Docket Number 08-AFC-7, Visual Resources, p. 321; California Energy Commission Decision for Mariposa Energy Project Docket Number 09-AFC-3, Visual Resources, p. 5; California Energy Commission Decision for

Once a scenic vista is identified, an adverse effect is presumed when a sizable component(s) of the project physically changes the scenic vista (e.g., obstruct).

Construction and Operation

Less Than Significant Impact. The project site is currently developed as the Eden Landing Business Park. It consists of nine one-story buildings, parking and loading areas, sidewalks, and landscaped interior and perimeter areas.

The proposed project's most publicly visible structures would include a three-story data center building (310,460 sq. ft.) with 28 emergency generators in a generation yard, a substation (23,210 sq. ft.), and a PG&E switching station (25,800 sq. ft.). Refer to **Section 3 Project Description** for greater detail about the project.

Staff reviewed current aerial and street view imagery (Google Earth, Google Maps), other area maps, and photographs showing the project site and vicinity, and concluded the project would be located on a "Basin Floor"- nearly level to gently sloping, bottom surface of an intermontane basin. The project site is not within a scenic vista as defined.

The General Plan does not show a scenic vista or have an applicable general plan policy pertaining to a scenic vista that includes the project site and the surrounding area. Also, an ordinance designating a scenic vista that includes the project site was not found by the staff.

Given the existing physical environment, the construction and operation of the project would not have a substantial adverse effect on a scenic vista and would have a *less than significant impact on the environment*.

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

Neither CEQA nor the CEQA Guidelines provide a definition of what constitutes a scenic resource. A *scenic resource* in addition to being designated in an adopted federal, state, or local government planning document, plan, or regulation, as suggested in the above aesthetics question may be explained as a widely recognized natural or man-made feature tangible in the landscape. Hence a scenic resource includes but is not limited to the following:

- A natural feature or object that is part of the land, such as a geologic distinguishing characteristic (e.g., batholith, laccolith, mesa), a geomorphologic feature produced

Blythe Solar Power Project Docket Number 09-AFC-6, Visual Resources, p. 514; California Energy Commission Decision for Genesis Solar Energy Project Docket Number 09-AFC-8, Visual Resources, p. 7-8; California Energy Commission Decision for Pio Pico Energy Center Docket Number 11-AFC-01, Visual Resources, p. 8.5-4.

from deposition or erosion (e.g., gorge, inselberg, moraine). A water body (e.g., lake, waterway, estuary). A tree recognized for its aesthetic, botanical, and ecological value, or age, rarity, and size.

- A man-made feature or object that embodies elements of architecture or engineering design, detail, materials, or craftsmanship that represent a significant innovation or is unique, such as the California State Capitol, Golden Gate Bridge, Hollywood sign.
- A cultural resource,⁵ historic property or landmark may be included. It should be recognized that cultural and historic values differ from aesthetic or scenic values (e.g., elegance, harmonious, imposing, sublime).

This analysis evaluated if the project would substantially damage—eliminate or obstruct—public view⁶ of a scenic resource, and whether the project would be situated so that it changes the visual appearance of a scenic resource by being in sharp contrast with the existing environment. The staff generally uses a three-mile⁷ distance zone surrounding the project site for this analysis.

An adverse effect exists if the project would eliminate or obstruct a public view of a scenic resource, and/or change its visual appearance.

Construction and Operation

Less Than Significant Impact. Staff reviewed the Hayward 2040 General Plan and concluded there is no designated/protected scenic resource on the project site or in the vicinity. Also, an ordinance identifying a specific scenic resource on the site or in the vicinity was not found.

The staff review of current aerial and street view imagery (Google Earth, Google Maps), area maps, a tour book guide, road atlas, Wikipedia, and photographs showing the project site did not identify a scenic resource as defined on the project site.

5 Cultural resources encompass all the physical evidence of past human activity. These could include buildings, structures, engineering features; prehistoric sites; historic or prehistoric artifacts or objects. These nonrenewable resources often yield unique information about past societies and environments and provide answers for modern day social and conservation problems. (NRCS 2025)

6 A public view can be defined as the area visible from a location where the public has a legal and physical right of access to real property (e.g., city sidewalk, public park, town square, state highway). California Code of Regulations, Title 14, Division 6, Chapter 3, Article 20 Appendix G Environmental Checklist Form, I. Aesthetics c. states "Public views are those that are experienced from publicly accessible vantage point." The California Courts of Appeal, Fourth District wrote "Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons." (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal. App. 4th 477.)

7 "Based on the curve of the Earth: Standing on a flat surface with your eyes about 5 feet off the ground, the farthest edge that you can see is about 3 miles away." (Roland 2019)

California Streets and Highways Code Section 263, the "State Scenic Highway System List" provides a list of highways that have been either officially designated or are eligible for designation as a State scenic highway. The project site is not shown along a designated State scenic highway.

A possible object/area for consideration is in the vicinity. The Eden Landing Ecological Reserve is a managed marsh approximately 1/3-mile to the southwest from the project site. Visitors experience and learn about South Bay salt marsh habitats, ongoing habitat restoration efforts, and bird watching. The reserve has an array of amenities including a public boat launch to Mt Eden Creek for paddlers.

"The Eden Landing Ecological Reserve is approximately 6,400 acres of restored salt ponds, adjacent diked marshes, and transitional areas to uplands that are managed for resident and migratory waterbirds and tidal marsh habitats and species. ...

The Eden Landing Bay Trail primarily follows the perimeter of the restored and managed wetlands and provides year-round public access for wildlife viewing. Approximately 4 miles of new Bay Trail spur segments were opened in 2016. From the main staging area at the end of Eden Landing Road, the year-round spur trail crosses over Mount Eden Creek and continuing along managed ponds, the slough and marsh until terminating at a shoreline viewing area approximately 2 miles into the reserve. Along the trail, interpretive exhibits describe wetland restoration and management, wildlife species known to use the area, and provide cultural resource interpretation. A boardwalk is open within the historic salt production area known as the Oliver Salt Works." (CDFW 2025)

The project would not eliminate or obstruct a public view of the Eden Landing Bay Trail nor change the visual appearance of it.

In review of city goal NR-8.3 Scenic Transportation Corridor Protection, staff did not identify a scenic resource, hillside, Bay shoreline, or a designated scenic corridor-related general plan standard or zone requirement applicable to the subject property and its frontage along State Route 92.

The project would not eliminate or obstruct a public view of a scenic resource nor change the visual appearance of it. The construction and operation of the project would have a *less than significant impact on the environment* to a scenic resource.

c. Would the project, 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?

Based on the definition of “urbanized area” under Public Resources Code section 21071,⁸ staff determined the proposed project to be in an urbanized area.

An adverse effect exists if the project in a non-urbanized area significantly degrades the existing visual character or quality of public views of the site and its surroundings, or if in an urbanized area conflicts with zoning and other regulations governing scenic quality.

Construction and Operation

Less Than Significant Impact. Staff reviewed the following applicable zoning and other regulations governing scenic quality in an urbanized area as defined:

- City of Hayward General Plan Land Use (LU) Goal 6 Industrial Technology and Innovation Corridor.

Land Use-6.7: Design Strategies states the following:

“The City shall encourage developments within the Industrial Technology and Innovation Corridor to incorporate the following design strategies:

- Provide attractive on-site landscaping and shade trees along street frontages and within employee and visitor parking lots.
- Screen areas used for outdoor storage, processing, shipping and receiving, and other industrial operations with a combination of landscaping and decorative fences or walls.
- Encourage consistent architectural facade treatments on all sides of buildings.
- Screen roof-top equipment with roof parapets.
- Design shipping and receiving areas and driveways to accommodate the turning movements of large trucks.
- Develop coordinated and well-designed signage for tenant identification and way-finding.
- Incorporate attractive building and site lighting to prevent dark pockets on the site.
- Provide pedestrian walkways to connect building entrances to sidewalks.
- Use landscaped buffers with trees and attractive sound walls to screen adjacent residential areas and other sensitive uses.” (Hayward 2014, p. 3-57)

8 An “urbanized area” means either “(a) An incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons. (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” (Pub. Res. Code § 21071[a]) An urbanized area also includes unincorporated area that satisfies the criteria in Pub. Res. Code § 21071(b).

Staff reviewed the STACK SVY03A Revised Project Description - Part I of II docketed August 16, 2024, that included Architectural Elevation A608 (DayZen 2024l). Staff also reviewed the STACK SVY03A Revised Project Description - Part II of II docketed August 16, 2024, which included the following: Preliminary Site Plan C200, Preliminary Arborist Report L-101-103 including Preliminary Landscaping Site Plan L200, L-201 and L-300, and Preliminary Trash Collector Vehicle Turning C-800 (DayZen 2024k). Staff concluded the project would be in conformance with the above design strategies.

- The IP zoning district maximum building height is 75 feet. (Hayward 2024, § 10-1.1604)

"The data center building is composed of admin, data hall, electrical and mechanical support spaces and loading dock masses. The maximum building height would be approximately 94 feet measured to the top of the main structure, 100 feet measured to the top of the building parapet, and 108 feet measured to the top of the small penthouse." (DayZen 2024l, p. 19)

A few purposes for a height requirement include to preserve a scenic vista, protect the public view of a scenic resource (e.g., an architectural structure, a landmark, natural feature), and to maintain the existing land use character of the surrounding area (e.g., agricultural, commercial, historical, residential).

Staff reviewed the General Plan and zoning, aerial and street imagery, area maps, site and vicinity photographs; building elevations, drawings, renderings, and similar, and concluded project buildings and structures would not be within a scenic vista, not eliminate or obstruct a public view of a scenic resource and would be concordant with the observable land use character, buildings, and structures in the surrounding area. Therefore, the proposed exceedance of the IP zoning district maximum building height would result in a less than significant impact to aesthetics.

- The IP zoning district minimum landscaping percentage of site requirement is 15 percent. (Hayward Municipal Code, § 10-1.1604)

STACK SVY03A Revised Project Description - Part I of II, Architectural Elevation A608 includes a site plan which shows the percentage landscape for the project site at 27 (approximately 135,545 square feet) (DayZen 2024l).

STACK SVY03A Revised Project Description - Part II of II, Preliminary Stormwater Control Plan C-500 shows the proposed percentage of pervious area would be 22.10 percent (DayZen 2024k). A pervious surface allows water to percolate through to the area underneath (e.g., mulch, lawns, soil, sand, silt, clay, etc.; also, pervious concrete; permeable pavers; porous asphalt). A pervious surface includes area for landscaping (planting/installation of ground covering) on a site.

- I. Screening. "Mechanical and Electrical Equipment. All exterior mechanical and electrical equipment shall be screened or incorporated into the design of buildings so as not to be visible from public rights-of-way." (Hayward 2024, § 10-1.1606 I.)

The applicant states "The structure will be architecturally treated to fit the surrounding context of the site. Mechanical equipment for buildings cooling will be housed inside the building along with exhaust baffles for existing hot-air. Electrical and backup battery equipment rooms will be housed inside the building." (DayZen 2024l, p. 19)

Architectural Elevation Figure A608 shows the generator yard screen wall in the rendering which hides/screens the diesel backup generators from public view.

- J. Trash and Recycling Facilities.
 1. Trash and recycling facilities shall be located within an enclosure with a roof and gate. The enclosure shall be constructed of decorative wood or masonry wall or combination thereof (unless waived by the Planning Director or other approving authority) that is compatible with the design of the primary building on the site.
 2. Trash and recycling facilities shall be located no further than 100 feet from the use it is designed to serve, unless the site topography is such that adhering to this standard would interfere with the collection of trash. (Hayward 2024, § 10-1.1606 J.)

STACK SVY03A Revised Project Description - Part I of II; Preliminary Site Plan C-200 and Preliminary Trash Collector Vehicle Turning C-800 shows two trash enclosures on the site (DayZen 2024l). The STACK SVY03A Revised Project Description - Part II of II Architectural Elevation Figure A608 shows an enclosure in the rendering (DayZen 2024k).

- M. Lighting, Exterior. Exterior lighting and parking lot lighting shall be provided in accordance with the Security Standards Ordinance (No. 90-26 C.S.) and be designed by a qualified lighting designer and erected and maintained so that light is confined to the property and will not cast direct light or glare upon adjacent properties or public rights-of-way. Such lighting shall also be designed such that it is in keeping with the design of the development." (Hayward 2024, § 10-1.1606 M.)

The applicant states "All proposed lighting would include shielding to reduce light spillover onto adjacent properties, consistent with the City's Exterior and Parking Lot Lighting Ordinance." (DayZenLLC 2023a, p. 52)

- N. Landscaping. Landscaping and irrigation shall be provided in accordance Chapter 10, Article 12 Bay-Friendly Water Efficient Landscaping Ordinance, and the following.
 1. Landscape Areas. The following areas shall be landscaped, and may count toward the total area of site landscaping required by the zoning district regulations.
 - a. Street Frontages. Street trees shall be planted along all street frontages at a minimum of one 24-inch box tree per 20 to 40 lineal feet of frontage or fraction thereof, except where space is restricted due to existing structures or site conditions.

- b. Required Yards. Required front, side, side street, and rear yard areas shall be landscaped, except for permitted driveways, and walkways. ...
 - d. Building Perimeters. Portions of buildings facing a public street shall have one or more landscaped areas with a minimum five-foot-wide landscaped area along a minimum 50 percent of the building face. ...
 - f. Other Areas. All other areas not utilized for structures or paving shall be landscaped unless otherwise authorized by the Planning Director or other approving authority because of site constraints, existing or adjacent site conditions, or phased development."
3. Tree Preservation. Trees shall be preserved in accordance with Chapter 10, Article 15, Tree Preservation Ordinance. (Hayward 2024, § 10-1.1606 N.)

The applicant states the following:

"The SVY03A Campus development proposes to remove 50 trees on-site, due to various conflicts with proposed civil and architectural improvements. The replacement of the trees on-site will comply with the mitigation measures described by the City of Hayward. Forty-seven (47) on-site trees will be mitigated through a combination of planting new on-site trees per the City's prescribed replacement ratios, as well as paying into the City of Hayward in-lieu fund for new trees at select locations within the City."

New landscaping consisting of trees, large and medium shrubs, and groundcovers will be installed along the property boundaries, building perimeters, stormwater treatment facilities, and landscape beds distributed throughout the parking facilities. Fifty-five (55) trees will be planted a minimum of five feet away from new or existing water mains or utility lines." (DayZen 2024l, p. 40).

Staff reviewed the STACK SVY03A Revised Project Description - Part II of II docketed August 16, 2024, which includes the Preliminary Arborist Report L-101-103 and Preliminary Landscaping Site Plan L200, L-201 and L-300 (DayZen 2024k). Staff concludes the project would comport with the city landscaping requirements.

Staff concludes the construction and operation of the project would not conflict with applicable zoning and other regulations governing scenic quality in an urbanized area. The project would have a less than significant impact on the environment.

Large Diesel Generator Backup Generation

The project would have 26 diesel generators (Caterpillar Model 3516E) to provide backup generation in case of an interruption to the normal electricity supply at the facility, one diesel generator (Caterpillar Model C32) for standby emergency diesel generation, and another diesel generator (Caterpillar Model D175 GC) to service the SVY03B building. Manufacturer performance data provided by the applicant shows generator exhaust stack flow gas temperatures at a 100 percent load standby are 896 degrees, 892.5 degrees, and 820.4 degrees Fahrenheit. These extremely hot

temperatures (greater than 212 degrees Fahrenheit heating stream) would evaporate (eliminate) the necessary saturated rising moisture exiting the generator exhaust stack that could condense in the atmosphere forming a visible plume. There is little to no water content in the generator exhaust stack flow. It is a hot dry air mass flow.

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

The project requires outdoor luminaires to illuminate driveways, entrances, walkways; operation, parking and loading areas, and for safety and security. Reflectance would occur from exterior surfaces of buildings, equipment, and structures. All surfaces reflect light.

Light, glare, and reflectance emitted from a project are analyzed to determine if each would create an adverse effect to the existing physical environment offsite and skyward (light pollution and reflectance).

"Light pollution is the human-made alteration of outdoor light levels from those occurring naturally." (DarkSky 2025) Light pollution "occurs when outdoor lighting is misdirected, misplaced, unshielded, excessive or unnecessary. As a result, light spills unnecessarily upward and outward, causing glare, light trespass, and a nighttime urban 'sky glow' overhead, indicating wasted energy and obscuring the stars overhead," (DSS 2022) and clutter.⁹

DarkSky International (formerly the International Dark-Sky Association) is a recognized worldwide authority combating light pollution. DarkSky International recognizes to minimize the harmful effects of light pollution, lighting should: only be on when needed; only light the area that needs it; be no brighter than necessary; minimize blue light emissions;¹⁰ and be fully shielded.¹¹

Reflectance is the proportion of perpendicularly incident light reflected from the surface or body of a material (Electrical 4U 2020). All surfaces reflect light. Materials and coatings that diffuse illumination or collection, reflectance and scattering are of utmost importance. Material with a non-shiny, textured or matt/powder finish are preferable to glossy or shiny finishes. A few examples of materials and surfaces that should be avoided if possible: any material with a reflectance greater than 35 percent; any shiny, highly reflective materials even for small surfaces; large smooth surfaces; and large expanses of glass. "An ideal coating is non-specular (to decrease geometrical effects)

9 Clutter is the bright, confusing and excessive grouping of light sources.

10 Studies show exposure to blue light can cause eye strain, fatigue, headaches, and sleeplessness.

11 "Fully shielded" means a luminaire constructed in a manner that all light emitted from the fixture, either directly from the lamp or a defusing element, or indirectly by reflection or refraction from any part of the luminaire is projected below the horizontal plane, as determined by photometric test or certified by the manufacturer.

durable, high in reflectance and spectrally flat over a wide wavelength range to give a flat spectral response in input or output.” (Labsphere 2024)

Construction and Operation

Less Than Significant Impact. The project site is currently developed with nine one-story buildings, occupied as warehouse and office s parking and loading areas, sidewalks, and landscaped interior and perimeter areas. Existing lighting on-site includes building-mounted security lighting, pole-mounted lights throughout parking areas.

The proposed project is to be constructed on 11.3 acres. The most publicly visible structures of the project would include a three-story data center building with a generation yard, a substation, and a PG&E switching station.

The city municipal code states “M. Lighting, Exterior. Exterior lighting and parking lot lighting shall be provided in accordance with the Security Standards Ordinance (No. 90-26 C.S.) and be designed by a qualified lighting designer and erected and maintained so that light is confined to the property and will not cast direct light or glare upon adjacent properties or public rights-of-way. Such lighting shall also be designed such that it is in keeping with the design of the development.” (Hayward 2024, § 10-1.1606 M.)

The applicant’s application contains statements demonstrating the intent to implement shielding, directional light, non-reflectance materials, and other light pollution and reflectance project design measures.

The applicant states “All proposed lighting would include shielding to reduce light spillover onto adjacent properties, consistent with the City’s Exterior and Parking Lot Lighting Ordinance.” (DayZenLLC 2023a, p. 52)

“G. Glare. No use shall be operated such that significant, direct glare, incidental to the operation of the use is visible beyond the boundaries of the lot where the use is located.” (Hayward 2024, § 10-1.1607 G)

The applicant states the following regarding reflectance, “The project would not include large portions of glass siding or other materials that would create glare. Additionally, proposed trees and landscaping along the project frontage would partially obscure the site from view of passing vehicles, further reducing potential glare.” (DayZenLLC 2023a, p. 52)

Staff reviewed Architectural Elevation Figure A608, the rendering of the three-story data center building. The data center building construction includes single component formawall, a building envelope system involving architectural insulated metal panels. The shown exterior surface(s) treatment, coatings, colors (blue, bronze, grey, white), textures, and materials for the building appear non-specular, spectrally flat, textured, and have a reflectance less than 35 percent. (DayZen 2024l)

Staff concludes the level of new light, glare, and reflectance by the project given the existing physical landscape as described and explained in this analysis would have a less than significant impact on the environment.

5.1.3 Mitigation Measures

None required.

5.1.4 References

- Amir and Gidalizon 1990 – S. Amir and E. Gidalizon (Amir and Gidalizon). "Expert-based method for the evaluation of visual absorption capacity of the landscape." *Journal of Environmental Management*, Vol. 30, No. 3, April 1990, cited by *The James Hutton Institute*, August 12, 2014. Accessed online at: <https://macaulay.webarchive.hutton.ac.uk/ccw/task-two/evaluate.html>
- CDFW 2025 – California Department of Fish and Wildlife (CDFW), Eden Landing Ecological Reserve website. Accessed online at: <https://wildlife.ca.gov/lands/places-to-visit/eden-landing-er#1054190-recreation>
- Daniel and Vining 1983 – T. Daniel and J. Vining (Daniel and Vining). "Methodological Issues in the Assessment of Landscape Quality," *Behaviour and the Natural Environment* (eds. Altman, I. and Wohwill, J.), Plenum Press. New York, 1983, pp. 39-83 cited by The James Hutton Institute, August 12, 2014. Accessed online at: <http://www.macaulay.ac.uk/ccw/task-two/evaluate.html>
- DarkSky 2025 – DarkSky International (DarkSky). Accessed online at: <https://www.darksky.org>
- DSS 2022 – Dark Sky Society (DSS). What is Light Pollution? Accessed online at: <https://www.darkskysociety.org/handouts/whatislp.pdf> via <https://www.darkskysociety.org/>
- DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024k – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024l – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- Electrical 4U 2020 – Electrical4U (Electrical 4U). "What is Reflectance?" October 22, 2020. Accessed online at: <https://www.electrical4u.com/what-is-reflectance/>

- Hayward 2014. – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. July 2014. Accessed online at: https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf
- Hayward 2024 – City of Hayward (Hayward). Hayward Municipal Code. Last amended December 17, 2024. Accessed online at: https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART1ZOOOR_S10-1.1600INDI
- Hull and Revell 1989 – R. Hull, and G. Revell (Hull and Revell). "Issues in sampling landscapes for visual quality assessments," Landscape and Urban Planning, Vol. 17, No. 4, August 1989, pp. 323-330 cited by The James Hutton Institute, August 12, 2014. Accessed online at: <http://www.macaulay.ac.uk/ccw/task-two/evaluate.html>
- Labsphere 2024 – Labsphere, Inc. (Labsphere). "Technical Guide Reflectance Coatings and Materials," 2024, Accessed online at: https://www.labsphere.com/resource/page/2/?r_type%5B0%5D=146
- Roland 2019 – James Roland, "How Far Can We See and Why?" May 23, 2019, Accessed online at: <https://www.healthline.com/health/how-far-can-the-human-eye-see>
- San Francisco Bay Area Water Trail, Eden Landing Ecological Reserve Trailhead Information website. Accessed online at: <https://sfbaywatertrail.org/trailhead/eden-landing/>
- NRCS 2025 – U.S. Department of Agriculture Natural Resources Conservation Service, Cultural Resources (NRCS). Accessed online at: <https://www.nrcs.usda.gov/cultural-resources>

5.2 Agriculture and Forestry Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to agriculture and forestry resources.

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.2.1 Environmental Setting

The project site is two contiguous parcels, which total approximately 11.3 acres. The site is currently occupied by a business park which would be demolished for development of the project (DayZenLLC 2023a, page 9). The project site is in an urban area, and there is no nearby agricultural or forest land.

Regulatory Background

Federal

No federal regulations relating to agriculture and forestry resources apply to the project.

State

Farmland Mapping and Monitoring Program. The California Department of Conservation (CDOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to assess the location, quantity, and quality of agricultural lands and conversion of those lands to other uses. The FMMP identifies and maps agricultural lands as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The current (2020) Alameda County Important Farmland Map shows that the project site is classified as Urban and Built-Up Land, defined as “occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel” (CDOC 2024a).

Williamson Act. The California Land Conservation Act of 1965, or Williamson Act, is the principal method for encouraging the preservation of agricultural lands in California (Gov. Code, § 51200 et seq.). It enables local governments to enter into contracts with private landowners who agree to maintain specified parcels of land in agricultural or related open space use in exchange for tax benefits. The project site is not covered by a Williamson Act contract (CDOC 2024b).

Local

City of Hayward General Plan and Zoning Ordinance. The project site has a General Plan land use designation of Industrial Technology and Innovation Corridor, or IC, under the *Hayward 2040 General Plan* (General Plan) (COH 2024a). The City of Hayward states that this land use designation is for building types including “warehouses, office buildings, research and development facilities, manufacturing plants, business parks, and corporate campus buildings” (COH 2024b). The City of Hayward zoning designation for the project site is Industrial Park, or IP (COH 2024a). This zoning designation is “intended to provide areas for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere” (COH 2024c).

5.2.2 Environmental Impacts

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-agricultural use?

Construction and Operation

No Impact. The project site is not mapped by the Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The current (2020) Alameda County Important Farmland Map shows that the project site is classified as “Urban and Built-Up Land”, a non-agricultural designation (CDOC 2024a). Therefore, the project would not convert farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) to a non-agricultural use, and construction and operation activities would cause no impacts to important farmland.

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

Construction and Operation

No Impact. The project site is zoned IP, which is not an agricultural zoning district (COH 2024a). The project site is also not under a Williamson Act contract (CDOC 2024b). Therefore, neither project construction nor operation would conflict with existing zoning for agricultural use or a Williamson Act contract, and no project impact would result.

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

Construction and Operation

No Impact. The City of Hayward has zoned the project site IP, which is “intended to provide areas for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere” (COH 2024c). It is not a zoning designation for forest land, timberland, or timberland production. Development in the region includes various urban uses. No land in the region is zoned for forest land, timberland, or timberland production, and there is no forest land or timberland in the area. Therefore, project construction and operation would not conflict with or cause rezoning of such lands, and no project impact would result.

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

Construction and Operation

No Impact. The project site does not contain forest land and is not in a region where forest land is present. Therefore, project construction and operation would cause no loss of forest land, and no project impact would result.

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

Construction and Operation

No Impact. The project site is currently developed as the Eden Landing Business Park and does not contain forest land or farmland. There is no forest land or farmland nearby in the urban area surrounding the project. Therefore, project construction and operation would cause no changes in the existing environment that could result in conversion of farmland to a non-agricultural use or conversion of forest land to a non-forest use, and no project impact would result.

5.2.3 Mitigation Measures

None required.

4.2.4 References

CDOC 2024a – California Department of Conservation (CDOC). Farmland Mapping and Monitoring Program. California Important Farmland Finder. Accessed on July 15, 2024. Accessed online at: <https://maps.conservation.ca.gov/DLRP/CIFF/>

CDOC 2024b – California Department of Conservation (CDOC). Farmland Mapping and Monitoring Program. California Williamson Act Enrollment Finder. Accessed on July 15, 2024. Accessed online at: <https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312>

COH 2024a – City of Hayward (COH). Hayward Web Map. Accessed on July 15, 2024. Accessed online at: <https://webmap.hayward-ca.gov/?loc=-13588507,4530849,12&lyrs=HaywardParcelBaseMap|layer0:33>

COH 2024b – City of Hayward (COH). Hayward 2040 General Plan. Industrial Land Use Designations. Accessed on July 15, 2024. Accessed online at: <https://www.hayward2040generalplan.com/land-use/industrial>

COH 2024c – City of Hayward (COH). City of Hayward Municipal Code. Section 10-1.1602 B. Industrial Park. Accessed on July 15, 2024. Accessed online at:

[https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYW
ARD_MUNICIPAL_CODE_CH10PLZOSU_ART1ZOR_S10-1.1600INDI](https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYW
ARD_MUNICIPAL_CODE_CH10PLZOSU_ART1ZOR_S10-1.1600INDI)

DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application –
Main App, Part I of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

5.3 Air Quality

This section describes the environmental setting and regulatory background and discusses impacts specific to air quality associated with the demolition/construction, readiness testing and maintenance, and the potential for emergency operation of the SVY03A Data Center Campus (SVY03A Campus) and the associated SVY03A Backup Generating Facility (SVY03ABGF.).

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.3.1 Environmental Setting

The proposed project is located at 26062 Eden Landing Road in the city of Hayward. The project is bound by Eden Landing Road to the north, Production Avenue to the east, Investment Boulevard to the south, and a developed parcel to the west.

Staff analyzes two primary types of air emissions: (1) criteria pollutants, which have health-based ambient air quality standards (AAQS); and (2) toxic air contaminants (TACs), which are identified as potentially harmful even at low levels and have no established safe levels or health-based AAQS.

Criteria Pollutants

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established AAQS for several pollutants based on their adverse health effects. The U.S. EPA has set National AAQS (NAAQS) for ozone (O₃), carbon monoxide (CO), NO₂, particulate matter less than or equal to 10 microns (PM₁₀), PM_{2.5}, sulfur dioxide (SO₂), and lead (Pb). These pollutants are commonly referred to as "criteria pollutants." Primary standards were set to protect public health; secondary standards

were set to protect public welfare against visibility impairment, damage to animals, crops, vegetation, and buildings. In addition, CARB has established California AAQS (CAAQS) for these pollutants, as well as for sulfate (SO₄), visibility reducing particles, hydrogen sulfide (H₂S), and vinyl chloride. California standards are generally stricter than national standards. The standards currently in effect in California and relevant to the project are shown in **Table 5.3-1**.

Attainment Status and Air Quality Plans

The U.S. EPA, CARB, and the local air districts classify an area as attainment, unclassified, or nonattainment. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data are available, or non-compliance with the ambient air quality standards, respectively. The proposed project would be located in Alameda County in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD).

Table 5.3-2 summarizes attainment status for the relevant criteria pollutants in the SFBAAB with both the federal and state standards.

TABLE 5.3-1 NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS				
Pollutant	Averaging Time	California Standards^a	National Standards^b	
			Primary	Secondary
O ₃	1-hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8-hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
PM ₁₀	24-hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Mean	20 µg/m ³	—	
PM _{2.5}	24-hour	—	35 µg/m ³	Same as Primary Standard
	Annual Mean	12 µg/m ³	9.0 µg/m ³ ^c	15 µg/m ³
CO	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
	8-hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
NO ₂	1-hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³) ^d	—
	Annual Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standard
SO ₂ ^e	1-hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
	3-hour	—	—	0.5 ppm (1,300 µg/m ³)
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^e	—
	Annual Mean	—	0.030 ppm (for certain areas) ^e	—

Notes: ppm=parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; "—" = no standard

^a California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded.

b National standards (other than O₃, PM, NO₂ [see note c below], and those based on annual arithmetic mean) are not to be exceeded more than once a year. The 8-hour O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. The 24-hour PM₁₀ standard of 150 µg/m³ is not to be exceeded more than once per year on average over a 3-year period. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentile concentration is less than or equal to 35 µg/m³.

c National standard of annual PM_{2.5} went into effect as of May 6, 2024 from 12 µg/m³ to 9 µg/m³.

d To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 0.100 ppm.

e On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The previous SO₂ standards (24-hour and annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is a U.S. EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS. Sources: BAAQMD 2024a, U.S. EPA 2024b.

TABLE 5.3-2 ATTAINMENT STATUS FOR SFBAAB

Pollutant	Averaging Time	State Designation	Federal Designation
O ₃	1-hour	Nonattainment	—
	8-hour	Nonattainment	Nonattainment
PM ₁₀	24-hour	Nonattainment	Unclassified
	Annual	Nonattainment	—
PM _{2.5}	24-hour	—	Nonattainment ^a
	Annual	Nonattainment	Unclassifiable/attainment ^b
CO	1-hour	Attainment	Attainment
	8-hour	Attainment	Attainment
NO ₂	1-hour	Attainment	Unclassifiable/Attainment
	Annual	Attainment	Attainment
SO ₂	1-hour	Attainment	Attainment/Unclassifiable ^c
	24-hour	Attainment	— ^d
	Annual	—	— ^d

Notes:

a On January 9, 2013, U.S. EPA issued a final rule to determine that the Bay Area attains the 24-hour PM_{2.5} national standard (U.S. EPA 2013). This U.S. EPA rule suspends key state implementation plan (SIP) requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this U.S. EPA action, the Bay Area will continue to be designated as “non-attainment” for the national 24-hour PM_{2.5} standard until such time as the BAAQMD submits a “redesignation request” and a “maintenance plan” to U.S. EPA, and U.S. EPA approves the proposed redesignation.

b The attainment status for annual PM_{2.5} NAAQS was based on the 2012 standard of 12.0 µg/m³. The State of California is currently working on designation recommendations for the new NAAQS of 9.0 µg/m³, which will be submitted to U.S. EPA by February 2025 (CARB 2025).

c On January 9, 2018, U.S. EPA issued a final rule to establish the initial air quality designations for certain areas in the US for the 2010 SO₂ primary NAAQS (U.S. EPA 2018). This final rule designated the SFBAAB as attainment/unclassifiable for the 2010 SO₂ primary NAAQS.

d See note e under **Table 5.3-1.**

Sources: BAAQMD 2024a, U.S. EPA 2013, U.S. EPA 2014, U.S. EPA 2018.

Overall air quality in the SFBAAB is better than most other developed areas in California, including the South Coast, San Joaquin Valley, and Sacramento regions. This is due to a more favorable climate, with cooler temperatures and regional air flow patterns that transports pollutants emitted in the air basin out of the air basin. Although air quality improvements have occurred, violations and exceedances of the state ozone and PM standards continue to persist in the SFBAAB and still pose challenges to state and local air pollution control agencies (CARB 2013). The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate, and the onshore breezes result in generally good air quality in the county.

Pollutants in the air can cause health problems, especially for children, the elderly, and people with heart or lung problems. Healthy adults may experience symptoms during periods of intense exercise. Pollutants can also cause damage to vegetation, animals, and property.

Existing Ambient Air Quality

Four background ambient air quality monitoring stations were used to characterize the background air quality for the site, each used for different sets of criteria pollutants: 3466 La Mesa Drive, Hayward (Ozone), 9925 International Boulevard, Oakland (CO, NO₂, PM_{2.5}), 1100 21 Street, Oakland (SO₂), 158 East Jackson Street, San Jose (PM₁₀).

The 3466 La Mesa Drive, Hayward monitoring station lies 5.3 miles north of the project site and is the closest monitoring station to the project. This monitoring station only measures ozone. It sits at an elevation of 951 feet and represents the highest elevation ozone monitoring site in the SFBAAB. The monitoring station's neighborhood spatial scale is used to represent the area's regional transport of pollutants to and from other populated regions. The station gives an indication of ozone levels at higher elevations and sub-regional transport from the Oakland area on the western portions of the East Bay Hills (BAAQMD 2024B). The site is not categorized as a State or Local Air Monitoring Station (SLAMS) as the BAAQMD requested closure of the site as a SLAMS in 2019, citing the site's consistently lower measured ozone concentrations than other monitors in the San Francisco-Oakland-Berkeley core-based statistical area (BAAQMD 2024B). However, the BAAQMD still operates the site as a Special Purpose Monitor (SPM) and maintains the same monitoring frequency and performance evaluation requirements as a SLAMS site. Because the site still maintains the same monitoring frequency and the nearest SLAMS ozone monitor (897 Barron Avenue site in Redwood City) is more than twice as far away (11 miles as opposed to 5.3 miles), staff believes that the 3466 La Mesa Drive, Hayward monitoring station is the appropriate station to represent background ozone concentrations at the project site.

The 9925 International Boulevard, Oakland monitoring site is located 8.5 miles north of the project and is used to characterize the background CO, NO₂, and PM_{2.5} concentrations for the project. The site is located on a commercial strip in a residential

area of Oakland and represents the closest monitoring site to the project for those pollutants. The site's middle scale spatial representativeness for PM_{2.5} is based on its distance to roadways and traffic counts. The BAAQMD considers the site's PM_{2.5} monitor characteristic of area-wide air quality and to be representative of many similar locations throughout the metropolitan area (BAAQMD 2024B).

The 1100 21st Street, Oakland monitoring station is located 15.7 miles northwest of the project and is used to characterize ambient concentrations of SO₂. The site is the closest SO₂ monitoring station to the project and is located one mile downwind of the Port of Oakland. The neighborhood spatial scale of the monitor characterizes population exposure and is also appropriate to measure the highest concentrations of pollutants in the area, however, this is not a stated objective given by the BAAQMD for the site. (BAAQMD 2024B).

The 158 East Jackson Street, San Jose monitoring site is located 22.8 miles southeast of the project, near a number of major freeways, the San Jose International Airport, and commercial and residential areas. The site is the second closest PM₁₀ station to the project, the 10 Arkansas Street, San Francisco monitoring station being approximately five miles closer to the project site. However, the 10 Arkansas Street monitoring station in San Francisco does not meet the once every 6th day monitoring frequency requirement to be considered a SLAMS. The 10 Arkansas Street site is also exposed to westerly sea breezes that consistently lower measured pollution concentrations, a station feature not characteristic of the project site (BAAQMD 2024B). Staff therefore believes that the 158 East Jackson Street station in San Jose would be the more appropriate site to be used for PM₁₀ background concentration values.

Table 5.3-3 presents the air quality monitoring data from the selected monitoring stations from 2019 to 2023, the most recent years for which data are available. Data in this table that are marked in **bold** indicate that the most-stringent current standard was exceeded during that period.

The maximum concentration values listed in **Table 5.3-3** have not been screened to remove values that are designated as exceptional events. Violations that are the result of exceptional events such as wildfires are normally excluded from consideration as AAQS violations. Exceptional events undoubtedly affected many of the maximum concentration values in recent years, especially between September to mid-November during wildfire activity. The ozone, PM₁₀, and PM_{2.5} in 2020 and 2021 illustrate the effect of events like extensive northern California wildland fires.¹ Even though fires tended to be far from the monitoring stations, the blanket of smoke and adverse air quality most likely affected air monitoring stations in the urban areas surrounding the project. For a conservative analysis, staff uses the background ambient air quality

¹ Wildfires also emit substantial amounts of volatile and semi-volatile organic materials and nitrogen oxides that form ozone and organic particulate matter (NOAA 2019).

concentrations from 2021 to 2023 to represent the baseline condition at the project site.

TABLE 5.3-3 AMBIENT AIR QUALITY MONITORING DATA

Pollutant	Averaging Time	2019	2020	2021	2022	2023
O ₃ (ppm) ^a	1-hour	0.106	0.116	0.097	0.098	0.085
	8-hour	0.085	0.092	0.082	0.073	0.06
PM ₁₀ (µg/m ³) ^b	24-hour	77.1	137.1	45.1	44.5	_ ^e
	Annual	19.1	_ ^e	20.1	21.3	_ ^e
PM _{2.5} (µg/m ³) ^c	24-hour (98th percentile)	17	46.7	19.4	20.6	17.9
	Annual	6.8	11.4	8.0	8.3	6.5
NO ₂ (ppb) ^c	1-hour (Maximum)	50	48	49.5	43.5	48.2
	1-hour (98th percentile)	38.8	38.9	35.3	39.8	36
	Annual	8.8	9.4	8.3	8.9	7.3
CO (ppm) ^c	1-hour	2.4	3.2	2.3	2.2	2.3
	8-hour	1.1	1.7	1.1	1.3	0.8
SO ₂ (ppb) ^d	1-hour (Maximum)	19.2	15.4	10.9	8	2
	1-hour (99th percentile)	9	4.5	3.1	5	1.8
	24-hour	2.7	2.5	1.2	1.2	0.9

a 3466 La Mesa Drive, Hayward monitoring station

b 9925 International Boulevard, Oakland monitoring station

c 1100 21st Street, Oakland monitoring station

d 158 East Jackson Street, San Jose monitoring station

e Value unavailable due to data incompleteness

Concentrations in **bold** type are those that exceed the limiting ambient air quality standard.

Sources: CARB 2024a (iADAM), U.S. EPA 2024c.

Health Effects of Criteria Pollutants

Below are descriptions of the health effects of criteria pollutants that are a concern in the regional study area. The California Health and Safety Code Section 39606 requires the CARB to adopt ambient air quality standards at levels that adequately protect the health of the public, including infants and children, with an adequate margin of safety. Ambient air quality standards define clean air (CARB 2024b).

Ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and NO_x, including NO₂. ROG and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight.

Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli, potentially leading to wheezing and shortness of breath. Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when

taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema, and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease. Long-term exposure to ozone is linked to aggravation of asthma and is likely to be one of many causes of asthma development. Long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children. Inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, and exposure to ozone can reduce the volume of air that the lungs breathe in and cause shortness of breath.

People most at risk for adverse health effects from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Studies show that children are no more or less likely to suffer harmful effects than adults. However, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures.

Particulate Matter. PM₁₀ and PM_{2.5} represent size fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility.

Nitrogen Dioxide. Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods (as represented by the 1-hour standards) can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ (as represented by the annual standards) may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO₂. Nitrogen oxides (includes NO₂ and NO – nitric oxide) react with other chemicals in air and sunlight to form both particulate matter and ozone.

Carbon Monoxide. CO is a pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These

conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

Sulfur Dioxide. SO₂ is produced through combustion of sulfur or sulfur-containing fuels such as coal. SO₂ is also a precursor to the formation of atmospheric sulfate and particulate matter (PM₁₀ and PM_{2.5}) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

Lead. Lead has a range of adverse neurotoxin health effects and was predominately released into the atmosphere primarily via the combustion of leaded gasoline. The phase-out of leaded gasoline has resulted in decreasing levels of atmospheric lead.

Toxic Air Contaminants

According to Section 39655 of the California Health and Safety Code, a toxic air contaminant (TAC) is "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health." In addition, substances which have been listed as federal hazardous air pollutants (HAPs) pursuant to Section 7412 of Title 42 of the United States Code are TACs under the state's air toxics program pursuant to Section 39657 (b) of the California Health and Safety Code. CARB formally made this identification on April 8, 1993 (Title 17, California Code of Regulations, Section 93001 [OEHHA 2024]). TACs, also referred to as HAPs or air toxics, are different from criteria air pollutants such as ground-level ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. Criteria air pollutants are regulated using national and state Ambient Air Quality Standards as noted above. However, there are no ambient standards for most TACs² so site-specific health risk assessments (HRAs) are conducted to evaluate whether risks of exposure to TACs create an adverse impact. Specific TACs have known acute, chronic, and cancer health impacts. TACs that have been identified by CARB are listed at Title 17, California Code of Regulations, Sections 93000 and 93001. The nearly 200 regulated TACs include asbestos, organic, and inorganic chemical compounds and compound categories, diesel exhaust, and certain metals. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act apply to facilities that emit these listed TACs above regulated threshold quantities.

Diesel exhaust is a complex mixture of thousands of gases and fine particles and contains over 40 substances listed by the U.S. EPA as hazardous air pollutants and by CARB as toxic air contaminants. The solid material in diesel exhaust is known as diesel particulate matter (DPM) (CARB 2024c). DPM has been the accepted surrogate for

² Ambient air quality standards for TACs exist for lead (federal and state standards), hydrogen sulfide (state standard), and vinyl chloride (state standard).

whole diesel exhaust since the late 1990's. CARB identified DPM as the surrogate compound for whole diesel exhaust in its Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant staff report in April 1998 (Appendix III, Part A, Exposure Assessment [CARB 1998]). DPM is primarily composed of aggregates of spherical carbon particles coated with organic and inorganic substances. Diesel exhaust is also characterized by CARB as "particulate matter from diesel-fueled engines."

Health Effects of TACs

The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs could cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis or genetic damage; or short-term effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches (BAAQMD 2023, p. 5-12). Numerous other health effects also have been linked to exposure to TACs, including heart disease, Sudden Infant Death Syndrome, respiratory infections in children, lung cancer, and breast cancer (OEHHA 2015).

Diesel exhaust deserves particular attention mainly because of its ability to induce serious noncancerous effects and its status as a likely human carcinogen. The impacts from human exposure would include both short- and long-term health effects. Short-term effects can include increased coughing, labored breathing, chest tightness, wheezing, and eye and nasal irritation. Effects from long-term exposure can include increased coughing, chronic bronchitis, reductions in lung function, and inflammation of the lung. Epidemiological studies strongly suggest a causal relationship exists between occupational diesel exhaust exposure and lung cancer. Diesel exhaust is listed by the U.S. EPA as "likely to be carcinogenic to humans" (U.S. EPA 2002).

Sensitive Receptors

Sensitive receptors are defined as groups of individuals that may be more susceptible to health risks due to chemical exposure. Sensitive individuals, such as infants, the aged, and people with specific illnesses or diseases, are the subpopulations which are more sensitive to the effects of toxic substance exposure. Examples of sensitive receptors include residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences could include houses, apartments, and senior living complexes. Medical facilities could include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers (BAAQMD 2023, p. 5-11). The potential sensitive receptor locations evaluated in the HRA for SVY03A include (DayZenLLC 2023a, p. 93):

- Residential dwellings, including apartments, houses, and condominiums
- Schools (public and private), colleges, and universities
- Daycare facilities
- Hospitals and health clinics

- Senior-care facilities

Sensitive Receptors Near the Project

BAAQMD recommends that any proposed project including the siting of a new TAC emissions source assess associated community risks and hazards impacts within 1,000 feet of the proposed project, and take into account both individual and nearby cumulative sources (that is, proposed project plus existing and foreseeable future projects). Cumulative sources represent the combined total risk values of each individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius (BAAQMD 2023, p. A-38).

Staff previously used a 6-mile radius for cumulative impacts analyses of power plant cases. Based on staff's modeling experience, beyond 6 miles there is no statistically significant concentration overlap for non-reactive pollutant concentration between two stationary emission sources. The 6-mile radius is more appropriate to be used for the turbines with tall stacks and more buoyant plumes. The diesel emergency standby engines would result in more localized impacts due to shorter stacks and less buoyant plumes. The worst-case impacts of the diesel emergency standby engines would occur at or near the fence line and decrease rapidly with distance from fence line. This also explains why the BAAQMD recommends 1,000 feet as the boundary for the cumulative health risks assessment in the BAAQMD CEQA Guidelines.

The project site is approximately 11.3 acres (DayZenLLC 2023a, p. 80). The applicant lists the nearest sensitive receptors in Table 4.3-16 in DayZenLLC 2023a and Appendix AQ5-1 (DayZenLLC 2023c) of the SPPE application. There are no sensitive receptors within 1,000 feet of the project. The closest sensitive receptors to the project site are residences located 2,985 feet north-northwest of the project boundary (DayZenLLC 2023a, pp. 89 and 94). **Figure 5.3-1** shows the map of sensitive receptors near the project.

Overburdened Community

One goal of BAAQMD's Community Air Risk Evaluation Program (CARE Program) is to identify areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution³. Overburdened communities⁴ are locations that are especially vulnerable to air pollution impacts due to high background levels of air pollution or other environmental pollution burdens, presence of sensitive populations, and socioeconomic factors that may lead to inadequate health care or other health stressors. For the purposes of applying the overburdened community

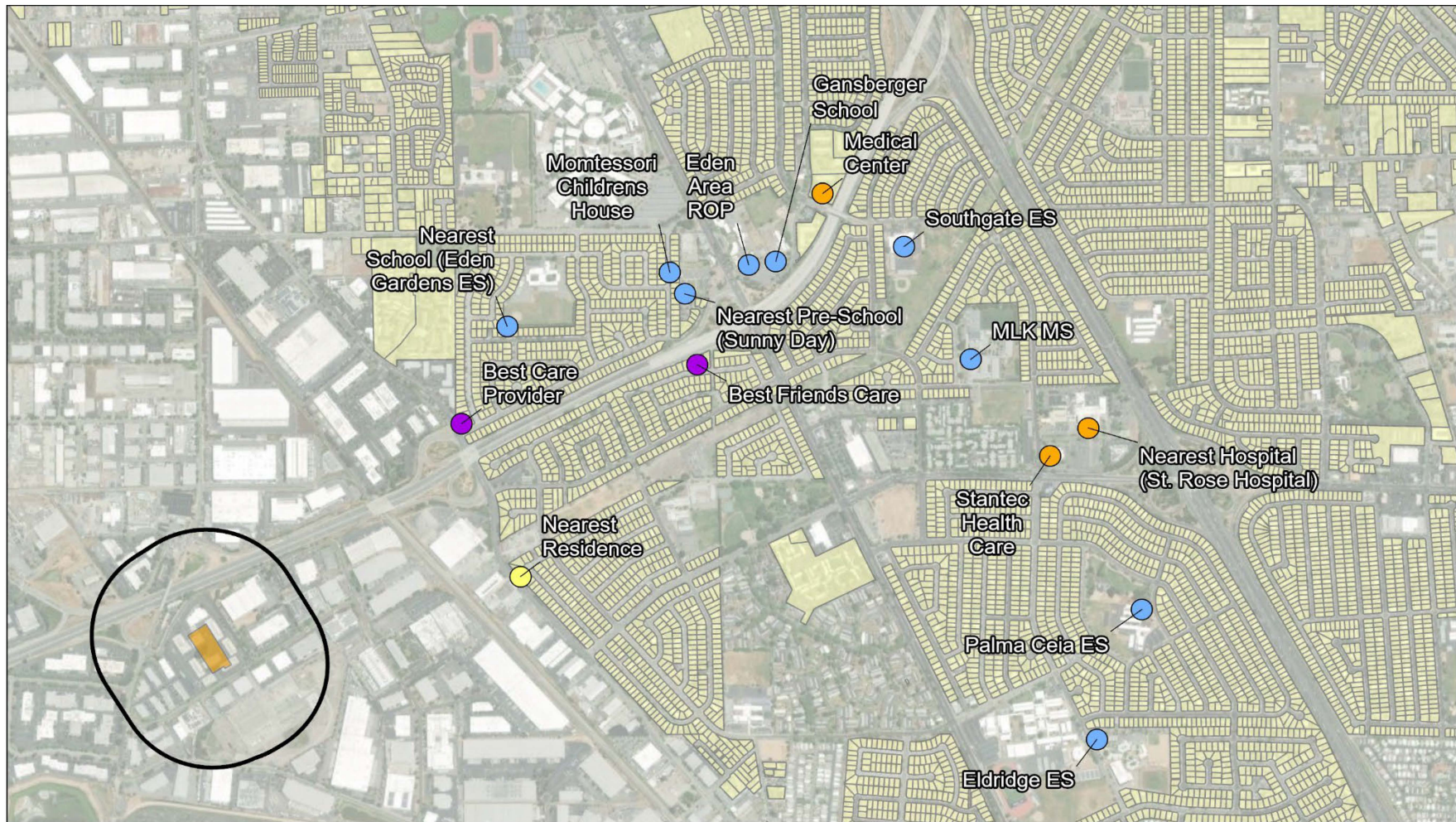
3 <https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program>

4 https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20220815_2022permitreform_faqs-pdf.pdf?la=en

requirements in Regulation 2, Rules 1 and 5, an overburdened community is defined in Regulation 2, Rule 1, Section 243⁵. The proposed project is located in Census Tract 6001437101 which has a CalEnviroScreen 4.0 rating of 74 percentile, which places the project in an overburdened community (DayZenLLC 2023a, p. 94). These are designated communities that are overburdened by air pollution and other health disparities (DayZenLLC 2024a, p. 3).

The BAAQMD limits the excess lifetime cancer risk to 10 in one million as the maximum risk, meaning that a higher risk is deemed unacceptable on a project basis. Recent amendments to the BAAQMD Regulation 2-5 have limited the cancer risk to 6 in one million for designated overburdened communities. At this time, the BAAQMD has not proposed to change the CEQA cancer risk threshold to align with amendments made in Regulation 2-5 (DayZenLLC 2024a, p. 3). However, as noted in the risk assessment below, the 6 in one million risk threshold was used for both worker and sensitive (residential) receptors. A hazard and chronic index of 1.0 is the target threshold for all areas and was not revised for overburdened communities (BAAQMD Regulation 2-1-243).

5 Overburdened Community: An area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract (BAAQMD Regulation 2-1-243).



Stack SVY03A

- Project Footprint
- 1,000 Ft Influence Zone
- Residential Community

Sensitive Receptors Outside
1,000 Foot Influence Zone

- Nearest Residence
- Health Care Facility
- Nursing Home
- School

0 1,000 2,000 3,000 Feet

Figure 5.3-1
1,000 Foot Influence Zone

Sources: California Energy Commission,
HIFLD, USGS, CDPH, ORNL, Esri

Regulatory Background

The air quality evaluation below assesses the degree to which the project would potentially cause a significant impact according to CEQA guidelines established by the state of California. Federal, state, and regional agencies share responsibility for managing and regulating air quality in the San Francisco Bay Area Air Basin.

Federal

Clean Air Act. The federal Clean Air Act (CAA) establishes the statutory framework for regulation of air quality in the United States. Under the CAA (Title 42, U.S. Code Section 7401 *et seq.*), the U.S. EPA oversees implementation of federal programs for permitting new and modified stationary sources, controlling toxic air contaminants, and reducing emissions from motor vehicles and other mobile sources.

Title I (Air Pollution Prevention and Control) of the federal CAA requires establishment of NAAQS, air quality designations, and plan requirements for nonattainment areas. States are required to submit a state implementation plan (SIP) to the U.S. EPA for areas in nonattainment with NAAQS. The SIP, which is reviewed and approved by the U.S. EPA, must demonstrate how state and local regulatory agencies will institute rules, regulations, and/or other programs to attain NAAQS.

Prevention of Significant Deterioration (PSD) is a federal program for federal attainment areas. The purpose of the federal PSD program is to ensure that attainment areas remain in attainment of NAAQS based upon a proposed facility's annual potential to emit. If annual emissions of a proposed project are less than prescribed amounts, a PSD review is not required. The project is not expected to be subject to PSD, with a final determination made by the local district at the time of permitting.

New Source Performance Standard (NSPS) Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Federal CAA Section 111 (Title 42, U.S. Code Section 7411) authorizes the U.S. EPA to develop technology-based standards for specific categories of sources. Manufacturers of emergency stationary internal combustion engines (ICE) using diesel fuel must certify that new engines comply with these emission standards (40 CFR 60.4205). Under NSPS Subpart IIII, owners and operators of emergency engines must limit operation to a maximum of 100 hours per year for maintenance and testing, including some use if necessary to protect grid reliability; there is no time limit on the use of an emergency stationary ICE in emergency situations [40 CFR 60.4211(f)]. The project's Tier 4 and Tier 3 diesel-fired generators would be subject to and likely to comply with the requirements in NSPS Subpart IIII.

National Emission Standard for Hazardous Air Pollutants. Federal CAA Section 112 (Title 42, U.S. Code Section 7412) addresses emissions of hazardous air pollutants (HAPs). The CAA defines HAPs as a variety of substances that pose serious health risks. Direct exposure to HAPs has been shown to cause cancer, reproductive effects or birth

defects, damage to brain and nervous system, and respiratory disorders. Categories of sources that cause HAP emissions are controlled through separate standards under CAA Section 112: National Emission Standards for Hazardous Air Pollutants (NESHAP). These standards are specifically designed to reduce the potency, persistence, or potential bioaccumulation of HAPs. New sources that emit more than ten (10) tpy of any specified HAP or more than 25 tpy of any combination of HAPs are required to apply Maximum Achievable Control Technology (MACT).

Asbestos is a HAP regulated under the U.S. EPA NESHAP. The asbestos NESHAP is intended to provide protection from the release of asbestos fibers during activities involving the handling of asbestos. Air toxics regulations under the CAA specify work practices for asbestos to be followed during operations of demolitions and renovations. The regulations require a thorough inspection of the area where the demolition or renovation operations would occur and advance notification of the appropriate delegated entity. Work practice standards that control asbestos emissions must be implemented, such as removing, wetting, and sealing in leak-tight containers all asbestos-containing materials (ACM) and disposing of the waste as expediently as practicable.

State

Generally, state law designates local air districts as having primary responsibility for the control of air pollution from all sources other than mobile sources while the control of vehicular air sources is the responsibility of CARB. (Health and Saf. Code, Section 39002) CARB is also responsible for the state's overall air quality management, including, among other things, establishing CAAQS for criteria pollutants identifying TACs of statewide concern and adopting measures to reduce the emissions of those TACs through airborne toxic control measures (ATCM), and regulating emissions of GHGs.

Air Toxic "Hot Spots" Information and Assessment Act of 1987. The Air Toxic "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill 2588 (Connelly, Statutes of 1987), and codified as Health and Safety Code, Section 44300 and the following), identifies TAC hot spots where emissions from specific stationary sources may expose individuals to an elevated risk of adverse health effects, particularly cancer or reproductive harm. Many TACs are also classified as HAPs. AB 2588 requires that a business or other establishment identified as a significant stationary source of toxic emissions provide the affected population with information about the health risks posed by their emissions.

Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines, Emergency Standby Diesel-Fueled Compression Ignition Engines.

Statewide regulations govern the use of and emissions performance standards for emergency standby diesel-fueled engines, including those of the project. As defined in regulation (Cal. Code Regs., tit. 17, Section 93115.4(a)(29)), an emergency standby engine is, among other possible uses, one that provides electrical power during an

emergency use and is not the source of primary power at the facility and is not operated to supply power to the electric grid. The corresponding ATCM (Cal. Code Regs., tit. 17, CCR Section 93115.6) restricts each emergency standby engine to operate no more than 50 hours per year for maintenance and testing purposes. The ATCM establishes no limit on engine operation for emergency use or for emission testing to show compliance with the ATCM's standards.

Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations. CARB has adopted the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations to minimize the generation of asbestos from earth disturbance or construction activities (Cal. Code Regs., tit.17 Section 93105). The Asbestos ATCM applies to any project that would include sites to be disturbed in a geographic ultramafic rock unit area or an area where naturally occurring asbestos, serpentine, or ultramafic rocks are determined to be present. Based upon review of the U.S. Geological Survey map detailing the natural occurrence of asbestos in California, naturally occurring asbestos is not expected to be present at the project site (Van Gosen and Clinkenbeard 2011).

Regional

The BAAQMD is the regional agency charged with preparing, adopting, and implementing emission control measures and standards for stationary sources of air pollution pursuant to delegated state and federal authority, for all projects located within their jurisdiction. Under the California CAA, the BAAQMD is required to develop an air quality plan to achieve and/or maintain compliance with federal and state nonattainment criteria pollutants within the air district's boundary.

Bay Area 2017 Clean Air Plan. BAAQMD adopted the Bay Area 2017 Clean Air Plan (CAP) on April 19, 2017 (BAAQMD 2017). The 2017 CAP provides a regional strategy to protect public health and protect the climate. The 2017 CAP updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health & Safety Code. The 2017 CAP defines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone and key ozone precursors, and GHG.

BAAQMD California Environmental Quality Act Guidelines. BAAQMD publishes California Environmental Quality Act (CEQA) Air Quality Guidelines to assist lead agencies in evaluating a project's potential impacts on air quality. The BAAQMD published the most recent version of its CEQA Air Quality Guidelines in April 2023 (BAAQMD 2023).

BAAQMD Regulation 2, Rule 2: New Source Review (NSR). This rule applies to all new or modified sources requiring an Authority to Construct permit and/or Permit to Operate. The NSR process requires the applicant to use BACT to control emissions if the source will have the PTE a BAAQMD BACT pollutant in an amount of 10 or more pounds

per day (lbs/day). The NSR process also establishes the requirements to offset emissions increases and to protect NAAQS.

To prevent sources from worsening regional nonattainment conditions, the NSR rule requires offsets at a 1:1 ratio if more than 10 tpy of NO_x or precursor organic compounds (POC), or more than 100 tpy of PM_{2.5}, PM₁₀, or SO₂, are emitted. If the PTE for NO_x or POC is more than 10 tpy but less than 35 tpy, BAAQMD needs to provide any required offsets at 1:1 ratio from the Small Facility Banking Account in BAAQMD's Emissions Bank. If the PTE for NO_x or POC is 35 tpy or more, the offset ratio increases to 1.15:1 and offsets can no longer be obtained through the Small Facility Banking Account.

On June 3, 2019, BAAQMD staff issued a new policy to protect the Small Facility Banking Account from over-withdrawal by new emergency backup generator sources. The policy provides procedures, applicable to the determination of access to the Small Facility Banking Account only, for calculating a facility's PTE to determine eligibility for emission reduction credits (ERCs) from the Small Facility Banking Account for emergency backup generators (BAAQMD 2019). When determining the PTE for a facility with emergency backup generators, the PTE shall include as a proxy, emissions proportional to emergency operation for 100 hours per year per standby generator, in addition to the permitted limits for readiness testing and maintenance (generally 50 hours/year or less per standby or backup engine). BAAQMD would not allow an owner/operator to accept a permit condition to limit emergency operation to less than 100 hours per year to reduce the source's PTE for purposes of qualifying for the Small Facility Banking Account.

After comparing the PTE calculated to determine the account eligibility threshold, the amount of offsets required would be determined only upon the permitted emissions from readiness testing and maintenance and not the emissions from emergency operation. Emissions offsets represent ongoing emission reductions that continue every year, year after year, in perpetuity. BAAQMD requires the use of offsets to counterbalance increases in regular and predictable emissions, not increases in emissions occurring infrequently when emergency conditions arise. An owner/operator may reduce the hours of readiness testing and maintenance or install emissions controls to achieve a PTE of less than 35 tons per year (BAAQMD 2019).

BAAQMD Regulation 2, Rule 5: New Source Review of Toxic Air

Contaminants. This rule provides for the review of new and modified sources of TAC emissions to evaluate potential public exposure and health risk. Under this rule, a project would be denied an Authority to Construct if it exceeds any of the specified risk limits, which are consistent with BAAQMD's California Environmental Quality Act (CEQA) significance thresholds. Best Available Control Technology for Toxics (TBACT) would also be required for any new or modified source of TACs where the source has a cancer risk greater than 1.0 in one million or a chronic hazard index (HI) greater than 0.20. The specific toxicity values of each TAC for use in an HRA, as identified by California

Office of Environmental Health Hazard Assessment (OEHHA), are listed in Table 2-5-1 of BAAQMD Rule 2-5.

BAAQMD amended Rule 1 and Rule 5 on December 15, 2021, the updates include⁶:

- Define overburdened communities
- Set more stringent cancer risk limit in overburdened communities from 10 in one million to 6 in one million
- Enhance public notifications for projects within overburdened communities
- Update health risk screening guidelines for gasoline dispensing facilities
- Extend permit review timelines

BAAQMD Regulation 9, Rule 8: Nitrogen Oxides And Carbon Monoxide From Stationary Internal Combustion Engines. This rule limits NO_x and CO emissions from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower, including the project's natural gas-fired engines and diesel-fired administrative generators. This regulation (Rule 9-8-231) defines emergency use as "the use of an emergency standby or low usage engine during any of the following:"

- In the event of unforeseeable loss of regular natural gas supply;
- In the event of unforeseeable failure of regular electric power supply;
- Mitigation or prevention of an imminent flood;
- Mitigation of or prevention of an imminent overflow of sewage or waste water;
- Fire or prevention of an imminent fire;
- Failure or imminent failure of a primary motor or source of power, but only for such time as needed to repair or replace the primary motor or source of power; or
- Prevention of the imminent release of hazardous material.

Local

City of Hayward General Plan. *Hayward 2040 General Plan* includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the city (Hayward 2014). The relevant air quality policies applicable to the project include:

- NR-2.2: The City shall review proposed development applications to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases (ROG), NO_x and particulate matter (PM₁₀ and PM_{2.5}) through project location and design.

⁶ <https://www.baaqmd.gov/news-and-events/page-resources/2021-news/121521-permit-rule>

- NR-2.3: The City shall require development projects that exceed BAAQMD ROG and NOx operational thresholds to incorporate design or operational features that reduce emissions equal to at least 15 percent below the level that would be produced by an unmitigated project.
- NR-2.18: The City shall require development projects to implement all applicable best management practices that will reduce exposure of new sensitive receptors (e.g., hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to odors, toxic air contaminants (TAC) and fine particulate matter (PM2.5).

In addition, goals and policies throughout the *Hayward 2040 General Plan* encourage a reduction in vehicle miles traveled through land use, pedestrian and bicycle improvements, and parking strategies that reduce automobile travel through parking supply and pricing management.

Significance Criteria

This analysis is based upon the methodologies and related thresholds in the most recent BAAQMD CEQA Air Quality Guidelines (BAAQMD 2023). These methodologies include qualitative determinations and quantification of whether project construction or operation, including readiness testing and maintenance, would exceed numeric emissions and health risk thresholds (BAAQMD 2023).

BAAQMD project-level thresholds of significance for criteria pollutants and precursor pollutants and TAC health risks that apply during construction and operation are shown in **Table 5.3-4**. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

For fugitive dust emissions during construction periods, BAAQMD does not have a significance threshold. Rather, BAAQMD recommends using a current Best Management Practices (BMPs) approach, which has been a pragmatic and effective approach to the control of fugitive dust emissions.

TABLE 5.3-4 BAAQMD THRESHOLDS OF SIGNIFICANCE

Pollutant	Construction	Operation	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
ROG/VOC	54	54	10
NOx	54	54	10
PM10	82 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10
PM10/ PM2.5 (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

TABLE 5.3-4 BAAQMD THRESHOLDS OF SIGNIFICANCE

Pollutant	Construction	Operation	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
Risk and Hazards for New Sources and Receptors (Individual Project)	Same as Operation Threshold	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in one million Increased cancer risk of >6.0 in one million within an Overburdened Community Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM2.5 increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	
Risk and Hazards for New Sources and Receptors (Cumulative Threshold)	Same as Operation Threshold	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in one million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM2.5: > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	

Sources: BAAQMD 2023, Table 1, pp. 3-5-7 and Table 3-1, p. E-9; BAAQMD 2021b

Significance criteria also include Significant Impact Levels (SILs) for the particulate matter portions of the analysis. Regulatory agencies have traditionally applied SILs as a *de minimis* value, which represents the offsite concentration predicted to result from a source's emissions that does not warrant additional analysis or mitigation. If a source's modeled impacts at any offsite location do not exceed relevant SILs, the source owner would typically not need to assess multi-source or cumulative air quality analysis to determine whether or not that source's emissions would cause or contribute to a violation of the relevant NAAQS or CAAQS.

Staff evaluates project emissions against the BAAQMD emissions thresholds and also analyzes the project's potential to expose sensitive receptors to increased concentrations of criteria pollutants. The AAQS are health protective values, so staff uses these health-based regulatory standards to help define what is considered a substantial pollutant concentration.⁷ The BAAQMD thresholds of significance are an important aspect of staff's air quality analysis. Therefore, staff's analysis determines whether the project would be likely to exceed any ambient air quality standard or contribute substantially to an existing or projected air quality violation, and if necessary,

⁷ This approach provides a complete analysis that describes the foreseeable effects of the project in relation to all potential air quality related health impacts, including impacts of criteria pollutants to sensitive receptors; and therefore, addresses the California Supreme Court December 2018 *Sierra Club v. County of Fresno* opinion (<https://www.courts.ca.gov/opinions/archive/S219783A.PDF>).

proposes mitigation to reduce or eliminate these pollutant exceedances or substantial contributions.

BAAQMD does not have significance criteria in terms of PM₁₀ concentrations or 24-hour concentrations of PM_{2.5}. To determine if the project could contribute to or create a substantial pollutant concentration for the nonattainment pollutant PM₁₀, this analysis relies on the U.S. EPA PM₁₀ SILs established in regulations for nonattainment areas [40 CFR 51.165(b)(2)] for 24-hour impacts ($5 \mu\text{g}/\text{m}^3$) and for annual impacts ($1 \mu\text{g}/\text{m}^3$). The same regulation [40 CFR 51.165(b)(2)] also established the U.S. EPA PM_{2.5} SILs concentrations for 24-hour impacts ($1.2 \mu\text{g}/\text{m}^3$).

The BAAQMD significance threshold for a project-level increase in PM_{2.5} concentrations is also $0.3 \mu\text{g}/\text{m}^3$ (as shown in **Table 5.3-4**). However, with the revised 2024 annual PM_{2.5} NAAQS of $9.0 \mu\text{g}/\text{m}^3$, the U.S. EPA issued a recommendation to set the PM_{2.5} SIL value for annual impacts at $0.13 \mu\text{g}/\text{m}^3$ (effective May 6, 2024 [U.S. EPA 2024a]). It should be noted that the U.S. EPA SILs values are all based on the forms of the applicable NAAQS. For example, the 24-hour PM_{2.5} SILs of $1.2 \mu\text{g}/\text{m}^3$ is based on the 98th percentile 24-hour concentrations averaged over 3 years. The annual PM_{2.5} SILs of $0.13 \mu\text{g}/\text{m}^3$ is based on a 3-year average of annual average concentrations. For this analysis, staff uses the U.S. EPA SILs as well as the BAAQMD significance threshold to determine impact significance of PM_{2.5} concentrations.

For health risk evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Therefore, there are two kinds of thresholds for TACs. Cancer risk is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to acceptable reference exposure levels (REL) for each of the TACs with acute and chronic health effects. The significance thresholds for TACs and PM_{2.5} are listed in **Table 5.3-4** and summarized in the following text (BAAQMD 2023).

The BAAQMD significance thresholds for a single source are as follows:

- An excess lifetime cancer risk level of more than 10 in one million (or 6.0 in one million within an Overburdened Community [BAAQMD 2021b]).
- A non-cancer chronic HI greater than 1.0.
- A non-cancer acute HI greater than 1.0.
- An incremental increase in the annual average PM_{2.5} concentration of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

The BAAQMD significance thresholds for cumulative impacts are also summarized below. A project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot distance from the fence line of a source and the contribution from the project, exceeds the following:

- An excess lifetime cancer risk level of more than 100 in one million
- A non-cancer chronic HI greater than 10.0
- An annual average PM_{2.5} concentration of greater than 0.8 µg/m³

5.3.2 Environmental Impacts

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

This section considers the project's consistency with the applicable air quality management plan. This is a qualitative determination that considers the combined effects of project construction and operation, including readiness testing and maintenance.

Construction and Operation

Less Than Significant Impact. The BAAQMD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents, and develops regulations that must be consistent with or more stringent than federal and state air quality laws and regulations. The applicable air quality plan (AQP) is the Bay Area 2017 Clean Air Plan (BAAQMD 2017).

A project would be consistent with the AQP if that project (BAAQMD 2023, pp. 5-2 and 5-3):

1. Supports the primary goals of the AQP.

The determination for this criterion, can be met through consistency with the BAAQMD significance thresholds. As explained in the discussions under environmental checklist criteria "b" and "c" of this air quality analysis, with the implementation of mitigation measure **AQ-1** and NO_x emissions fully offset through the permitting process with BAAQMD, the project would have less than significant impacts related to the BAAQMD significance thresholds. Since the project emissions comply with the significance thresholds, the project would have a less than significant impact related to the primary goals of the AQP.

2. Includes applicable control measures from the AQP.

The project would include the implementation of applicable control measures from the AQP. The project-level applicable control measures set forth in the Bay Area 2017 Clean Air Plan (CAP) include: Decarbonize Electricity Generation (EN1), Green Buildings (BL1), and Bicycle and Pedestrian Access and Facilities (TR9). The project would comply with these control measures through compliance with the *Hayward 2040 General Plan* and the City's Climate Action Plan, as demonstrated in more detail in **Section 5.8 Greenhouse Gas Emissions**.

3. Does not disrupt or hinder implementation of any AQP control measures.

Examples of disrupting or hindering implementation of an AQP would be proposing excessive parking or precluding the extension of public transit or bike paths. The project design as proposed is not known to hinder the implementation of any AQP control measure.

Implementation of AQP control measures in the Bay Area 2017 Clean Air Plan depends on successful management of new or modified stationary sources through the permitting process, including the NSR program. Staff expects the project to satisfy all applicable air quality requirements, including the provisions of the NSR program, as follows. If BAAQMD determines that NO_x emissions need to be offset, the NO_x emissions of the gensets during readiness testing and maintenance would be fully offset through the permitting process with BAAQMD. Final details regarding the calculation of the facility's PTE and the ultimate NSR permitting requirements under BAAQMD's Regulation 2, Rule 2, would be determined through the permitting process with BAAQMD.

For emergency-use diesel engines with output over 1,000 brake horsepower, BAAQMD updated the definition of BACT in December 2020 to reflect the use of engines achieving Tier 4 exhaust standards (BAAQMD 2020); this requires Tier 4-compliant engines, that may include Tier 2 engines abated by catalyzed diesel particulate filter (DPF) and selective catalytic reduction (SCR). Each of the 27 diesel back-up emergency generators with output over 1,000 brake horsepower proposed for this project would be equipped with SCR equipment and DPF to achieve compliance with Tier 4 emission standards. Staff expects the proposed generators would meet the current BAAQMD BACT requirements. However, BAAQMD would make the final determination of BACT during the permitting process.

The analysis in this section demonstrates that the project emissions would not exceed BAAQMD thresholds of significance, as discussed under criterion "b" of the environmental checklist, and the project would not create substantial pollutant concentrations, relative to the ambient air quality standards, as discussed under question "c" of the environmental checklist. Thus, the project would be consistent with the Bay Area 2017 CAP and would have a less than significant impact related to implementation of the applicable AQP.

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

This section quantifies the project's non-attainment criteria pollutant emissions and other criteria pollutant emissions to determine whether the net emissions increase would exceed any of the BAAQMD emissions thresholds for criteria pollutants. TAC effects are not included because this section focuses only on criteria pollutants.

Construction

Less Than Significant with Mitigation Incorporated. Project construction would require approximately 22 months between approximately the 2nd quarter of 2025 and the 2nd quarter of 2027. The onsite construction is expected to require a maximum of 150 workers per month and an average of 100 workers per month (DayZenLLC 2024I, p. 42).

Construction-phase emissions include demolition, excavation, and construction activities that cause exhaust from fuel combustion and fugitive dust. The emissions would result from use of construction equipment, demolition activities, soil disturbance, material movement, paving activities, and on- and offsite vehicle trips, such as material haul trucks, worker commutes, and delivery vehicles. Offsite construction emissions would occur as a result of materials transport to and from the site, and worker travel. Emissions within the first 45 days of construction would include demolition and excavation activities.

Staff estimated emissions from project construction using the California Emissions Estimator Model (CalEEMod) program (version 2022.1.1.29) and the CalEEMod inputs provided by the applicant (DayZenLLC 2023c). The applicant modeled off-road construction equipment as Tier 4 in their modeling inputs, and to ensure that Tier 4 off-road equipment are utilized during construction, staff proposes to add a requirement to **AQ-1** mandating their use. The estimated construction-phase criteria pollutant emissions are summarized in **Table 5.3-5**.

TABLE 5.3-5 CRITERIA POLLUTANT EMISSIONS FROM PROJECT CONSTRUCTION				
Pollutant	Maximum Average Daily Emissions (lbs/day)^a	Maximum Construction Emissions (tons/period)	BAAQMD Significance Thresholds for Construction-related Average Daily Emissions (lbs/day)^c	Threshold Exceeded?
ROG/VOC	3.82	1.18	54	No
CO	14.98	4.62	None	N/A
NOx	3.53	1.09	54	No
SOx	0.03	0.009	None	N/A
PM10 ^b	0.06 (exhaust) 1.33 (fugitive)	0.02 (exhaust) 0.41 (fugitive)	82 (exhaust)	No
PM2.5 ^b	0.06 (exhaust) 0.32 (fugitive)	0.02 (exhaust) 0.10 (fugitive)	54 (exhaust)	No

a BAAQMD's thresholds are average daily thresholds for construction. Accordingly, the average daily emissions are the total estimated construction emissions averaged over total workdays.

b The average daily PM10 and PM2.5 exhaust emissions are compared to the BAAQMD's significance thresholds for exhaust emissions.

c BAAQMD 2023, Table 3-1.

Sources: DayZenLLC 2023c, Appendix AQ4; CEC staff analysis.

The average daily emissions shown in **Table 5.3-5** indicate that construction emissions would be lower than the applicable thresholds of significance for all criteria pollutants.

The BAAQMD's numerical thresholds for PM10 and PM2.5 construction-phase emissions apply to exhaust emissions only. There is no numerical threshold for fugitive dust generated during construction. The BAAQMD CEQA Guidelines recommend control of fugitive dust through BMPs in order to conclude that impacts from fugitive dust emissions are less than significant (BAAQMD 2023). The applicant proposed measures (PD AIR-1.1) that would incorporate the BAAQMD's recommended construction BMPs for fugitive dust (DayZenLLC 2023a; p. 73). Staff reviewed the measures and proposes to add measures present in BAAQMD's most recent BMPs that the applicant's proposed measures do not contain to mitigation measure **AQ-1** (BAAQMD 2023, Table 5-2). Mitigation measure **AQ-1** would require the implementation of fugitive dust control to ensure that PM10 and PM2.5 emissions are reduced to a level that would not result in a considerable increase of these pollutants. This impact would be reduced to less than significant with the implementation of **AQ-1**.

Operation

Less Than Significant Impact. Operational emissions would result from genset diesel fuel combustion, off-site vehicle trips for worker commutes and material deliveries, and facility upkeep, including the application of architectural coatings, consumer product use, landscaping, water use, waste generation, fuel storage and electricity use.

Electricity from the grid would provide the energy for onsite building heating and cooling, lighting, appliances and electronics; no natural gas use would occur (DayZenLLC 2023a). The primary stationary sources are 28 individual gensets; the engines would be fueled by diesel from 28 individual storage tanks for a combined onsite diesel fuel storage capacity of approximately 295,600 gallons (DayZenLLC 2023a, DayZenLLC 2024m). Each of these emission sources is described in more detail below.

Stationary Sources – Generator Emissions. The project would include 28 gensets: 26 powered by 2.75-MW Caterpillar D3516E engines, one powered by a 1-MW Caterpillar C32 engine, and one powered by a 175-kW Caterpillar D175 engine (DayZenLLC 2023a, DayZenLLC 2024m). Each D3516E engine and the one C32 engine would be equipped with SCR and DPF to achieve compliance with Tier 4 emission standards. The D175 engine would meet compliance with Tier 3 emission standards.

All gensets would be operated for routine maintenance and readiness testing to ensure they would function during an emergency event. During routine readiness testing, criteria pollutants and TACs would be emitted directly from the gensets. Criteria pollutant emissions from generator testing were quantified using information provided by the manufacturer. In estimating the annual emissions, the applicant assumed that testing would occur for no more than 50 hours per year. The Airborne Toxic Control Measure for Stationary Compression Ignition Engines (Cal. Code Regs., tit.17, § 93115) limits testing to 50 hours per year per engine. However, it is the applicant's experience that each engine would be operated for considerably less than 50 hours a year. Maintenance and readiness testing usually occurs at loads ranging from 25 to 100 percent load (DayZenLLC 2023a). When filing this application, emissions estimates were

provided for engines operating at 100 percent load and settings at 75, 50, 25, and 10 percent (DayZenLLC 2023a, Appendix AQ2).

The applicant proposes to limit readiness and maintenance testing to a maximum of one engine per hour and testing of 10 engines maximum in one day. Genset operation for emergency use and emission testing for compliance purposes is not limited. The emission calculations are based on the genset horsepower, hours of operation, and emission factors provided by Miratech for the 2.75-MW and 1-MW engines (DayZenLLC 2023c, Appendix AQ2). Emission calculations for the 175 kW engine are based on compliance with Tier 3 emission standards for off-road compression ignition engines (DayZenLLC 2024m). The emission factors for sulfur dioxide (SO₂) are calculated with the assumption that the proposed genset will use ultra-low sulfur diesel fuel which contains 0.0015% sulfur as defined under 40 CFR 80, Subpart I (DayZenLLC 2023c, Appendix AQ2; DayZenLLC 2024m).

Under the proposed project, the emergency backup generators, or gensets, would use renewable diesel as the primary fuel with ultra-low sulfur (conventional) diesel as the secondary backup fuel if renewable diesel is unavailable, as required by mitigation measure **GHG-2**. However, the applicant estimated the emissions and air quality impacts based on the emission factors of conventional diesel. According to the currently available data (CARB 2021), the air quality and public health impacts using renewable diesel during project operations would likely be similar to those that would occur with the use of conventional diesel. Therefore, for the proposed project, staff expects that the impacts during project operations from the use of renewable diesel would be similar to those estimated based on the use of conventional diesel.

Emergency Operations. Emissions that could occur in the event of a power outage or other disruption, upset, or instability that triggers emergency operations would not occur on a regular or predictable basis. However, the BAAQMD 2019 policy, *Calculating Potential to Emit for Emergency Backup Power Generators*, requires a facility's PTE to be calculated based on emissions proportional to emergency operation for 100 hours per year per engine, in addition to the permitted limits for readiness testing and maintenance (BAAQMD 2019). However, after comparing the PTE calculated to determine the account eligibility threshold, the applicant would only be required to offset permitted emissions from readiness testing and maintenance and not the emissions from emergency operation. BAAQMD requires the use of offsets to counter increases in regular and predictable emissions, not increases in emissions occurring infrequently when emergency conditions arise. The potential ambient air quality impacts of emissions during emergency operations are analyzed qualitatively under CEQA environmental checklist criterion "c" starting from page 5.3-31.

Stationary Sources – Diesel Fuel Storage Tanks. Each of the 28 generator units would have a diesel fuel storage tank, with each tank's size varying on the type of generator unit. The applicant estimated the VOC emissions from the 28 diesel storage tanks using U.S. EPA's recommended methodology for liquid storage tanks. To estimate the annual fuel throughput of each tank, the applicant multiplied the hourly fuel usage

rate for the generators at 100 percent load by the proposed maximum annual hours of operation for the generators (50 hours annually).

Miscellaneous Operational Emissions. Miscellaneous operational emissions would occur from operational activities, such as worker travel, deliveries, energy and fuel use for facility electrical, heating and cooling needs, periodic use of architectural coatings, and landscaping, etc. The mobile source emissions include each vehicle trip generated by employees and visitors, for approximately 310 daily vehicle trips (**Section 5.17 Transportation, Table 5.17-3**). Temperatures in the interior space of the data center would be managed using water and evaporative cooling (DayZenLLC 2023a, p. 27).

Table 5.3-6 provides the annual criteria pollutant emission estimates for project readiness testing and maintenance using the emissions source assumptions noted above.

TABLE 5.3-6 CRITERIA POLLUTANT ANNUAL EMISSIONS FROM PROJECT OPERATION (TPY)						
Source Type	ROG/ VOC	CO	NOx	SO₂	PM₁₀	PM_{2.5}
Architectural Coating	0.08	--	--	--	--	--
Consumer Products	1.31	--	--	--	--	--
Landscaping	0.23	1.32	0.01	<0.001	0.002	0.002
Building Energy	--	--	--	--	--	--
Mobile Emissions	0.14	0.38	0.05	<0.001	<0.001	<0.001
Diesel Storage Tanks	0.007	--	--	--	--	--
Standby Generators ^{a,b} (Testing Only)	0.84	15.61	9.16	0.03	0.13	0.13
Proposed Offsets ^{c,d}	--	--	(-9.16)	--	--	--
Total Net Emissions (excludes Emergency Use)	2.59	17.0	0.06	0.03	0.12	0.12
BAAQMD Annual Significance Thresholds	10	--	10	--	15	10
Threshold Exceeded?	No	N/A	No	N/A	No	No

Sources: DayZenLLC 2023a; DayZenLLC 2023c, Appendix AQ4; CEC staff analysis.

Notes:

a The annual non-emergency use of the standby generators, for readiness testing and maintenance would be limited to 50 hours per year per engine.

b The NOx emissions for readiness testing and maintenance are estimated using a composite emission factor where the first 15 minutes of every hour of operation are assumed to emit at Tier 2 emissions levels, with the remainder of the hour emitting at Tier 4 emission levels.

c Per BAAQMD 2019 policy, the assumption of 100 hours per year of annual emergency use of the standby generators determines the applicability of BAAQMD offset banking account eligibility. This assumption is not used to determine the quantity of emission offsets required (BAAQMD 2019)

d The NOx emissions of the standby generators would not exceed 35 tpy. Therefore, the offset ratio would be 1:1 (BAAQMD 2019)

Table 5.3-7 provides the daily criteria pollutant emission estimates for project readiness testing and maintenance using the emissions source assumptions noted above.

TABLE 5.3-7 CRITERIA POLLUTANT AVERAGE DAILY EMISSIONS FROM PROJECT OPERATION (LBS/DAY)						
Source Type^a	ROG/ VOC	CO	NOx	SO₂	PM₁₀	PM_{2.5}
Architectural Coating	0.43	--	--	--	--	--
Consumer Products	7.19	--	--	--	--	--
Landscaping	2.4	14.6	0.12	< 0.005	0.03	0.02
Building Energy	--	--	--	--	--	--
Mobile Emissions	0.74	2.09	0.26	<0.005	0.16	0.16
Diesel Storage Tanks	0.04	--	--	--	--	--
Standby Generators ^b (Testing Only)	4.60	85.53	50.19	0.17	0.68	0.68
Proposed Offsets ^{a,c}	--	--	(-50.19)	--	--	--
Total Net Emissions (excludes Emergency Use)	12.5	49.7	0.38	0.06	0.51	0.5
BAAQMD Daily Significance Thresholds	54	--	54	--	82	54
Threshold Exceeded?	No	N/A	No	N/A	No	No

Sources: DayZenLLC 2023a; DayZenLLC 2023c, Appendix AQ4; CEC staff analysis.

Notes:

a The average daily emissions and offsets are based on the annual emissions and offsets averaged over 365 days per year.

b The NOx emissions for readiness testing and maintenance are estimated using a composite emission factor where the first 15 minutes of every hour of operation are assumed to emit at Tier 2 emissions levels, with the remainder of the hour emitting at Tier 4 emission levels.

c The NOx emissions of the standby generators would not exceed 35 tpy. Therefore, the offset ratio would be 1:1.

Table 5.3-6 and **Table 5.3-7** show that with the net NOx emissions from the readiness testing and maintenance of the gensets at less than 54 lbs/day and 10 tpy, the project would not exceed any of the BAAQMD emissions significance thresholds.

The annual rate of NOx emissions from the gensets assumes use of the gensets at 100 percent load, using a composite emission factor where the first 15 minutes of every hour of operation are assumed to emit at Tier 2 emissions levels, with the remainder of the hour emitting at Tier 4 emission level.

Staff evaluated the potential obligations for emission offsets by assuming 50 hours of operation for testing and maintenance purposes, plus an additional 100 hours of emergency operation. For the 100 hours of emergency operations (considering the BAAQMD 2019 policy [BAAQMD 2019]), staff estimated the annual NOx PTE as 14.5 tpy, which is greater than 10 tpy and less than 35 tpy. Therefore, if offsets are required, the offset ratio would be 1:1 with the inclusion of emergency operation and

the BAAQMD policy-required 100 hours. The exact amount and the source of the NO_x offsets would be confirmed through the permitting process with BAAQMD.

Annual and average daily rates of NO_x emissions shown in **Table 5.3-6** and **Table 5.3-7** were calculated using full load and composite emission factors. During the BAAQMD's review, different scenarios of emissions calculations may be used. The result could modify the offset requirement accordingly. Nonetheless, the NO_x emissions of the gensets during readiness testing and maintenance would be fully offset through the permitting process with BAAQMD, if BAAQMD determines that offsets are required.

In addition to the criteria air pollutant emissions shown above, ammonia would also be emitted from the urea used in the SCR system. Ammonia is considered a particulate precursor but not a criteria pollutant. Reactive with sulfur and nitrogen compounds, ammonia is common in the atmosphere primarily from natural sources or as a byproduct of tailpipe controls on motor vehicles. Currently, there are no BAAQMD-recommended models or procedures for estimating secondary particulate nitrate or sulfate formation from individual sources, such as the proposed project. BAAQMD CEQA Guidelines do not include a significance threshold for ammonia emissions. Staff conservatively estimated the ammonia emissions for the engines equipped with an SCR system to be 0.10 tpy, assuming the SCR system is effective for a total of 50 hours per year per engine. However, it would take time for the SCR to warm up, especially during low-load readiness testing and maintenance, and, therefore, actual ammonia emissions would be less than staff's estimates. The primary emissions of particulate matter from this project are well below the BAAQMD significance threshold and do not require additional mitigation or trigger the need for offsets. Therefore, staff expects the secondary particulate matter impacts from ammonia emissions would be less than significant and would not require additional mitigation or offsets.

The project's operations would not result in a cumulatively considerable net increase of any criteria pollutant, and therefore the impact of the project's criteria pollutant emissions would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

This section quantifies the ambient air quality pollutant concentrations caused by the project and determines whether sensitive receptors could be exposed to substantial pollutant concentrations.

This section is comprised of separate discussions addressing impacts from criteria pollutants in staff's Air Quality Impact Analysis (AQIA) and impacts from toxic air contaminants (TACs) in staff's Health Risk Assessment (HRA). Staff's AQIA discusses criteria pollutant impacts from construction and operation, including readiness testing and maintenance. Staff's HRA discusses the results of TACs for both construction and operation (including readiness testing and maintenance), and cumulative sources. Finally, the section discusses issues associated with potential emergency operations.

Air Quality Impact Analysis for Criteria Pollutants

Staff considers any new AAQS exceedance and substantial contribution to any existing AAQS exceedance caused by project emissions to be substantial evidence of potentially significant impacts that would require the evaluation of potential mitigation measures. In this case, the SFBAAB is classified as nonattainment for PM10 and PM2.5 AAQS.

Construction

Less Than Significant with Mitigation Incorporated. Construction emissions of criteria air pollutants are shown in **Table 5.3-5** under criterion “b” of the environmental checklist. Emissions during project construction would not exceed significance thresholds for construction activities, as established in the BAAQMD CEQA Guidelines. With the staff recommendation to implement **AQ-1** to control fugitive dust, construction emissions would not exceed the BAAQMD significance thresholds. Although project construction emissions would fall below the emissions thresholds, this section of the staff analysis explores the ambient air quality impacts of criteria pollutant emissions during construction to evaluate whether substantial pollutant concentrations could occur.

The applicant provided the modeled ambient air quality concentrations caused by the construction emissions (DayZen 2023a). Staff reviewed the applicant’s dispersion modeling files and agree with the inputs used by the applicant and the outputs from the model for the construction AQIA for all criteria pollutants.

The applicant’s Air Quality Impact Analysis (AQIA) uses the U.S. EPA preferred and recommended dispersion model, American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD [Version 22112]) to estimate ambient air quality impacts.

Meteorological Data. The applicant used the 5-year (2013-2017) record of hourly meteorological data provided by the BAAQMD. The meteorological data were collected at the Hayward Executive Airport surface station, which is located approximately 1.7 miles north of the project site and best represents the meteorology at the project site. The concurrent daily upper air sounding data from the Oakland International Airport station were also included. The BAAQMD preprocessed the data with AERMET (version 18081), AERMOD’s meteorological data preprocessor module, for direct use in AERMOD.

Modeling Assumptions. The applicant grouped the emission sources for the construction site into two categories: exhaust emissions and dust emissions. The applicant modeled the combustion equipment exhaust emissions as 105 point sources with vertical releases placed at regular intervals around the site. The applicant modeled the construction fugitive dust emissions as a single area source covering the site with an near-ground level release height of 0.5 meters (DayZenLLC 2023a). The applicant’s dispersion modeling assumes construction activities would be limited to 10 hours per day (7 AM to 5 PM) consistent with the expected period of onsite construction activities generating both exhaust emissions and fugitive dust.

Table 5.3-7 shows the impacts of the project during construction period. The project impact column shows the worst-case impacts of the project from modeling. The background column shows the highest concentrations, or the 3-year averages of the highest concentrations for 24-hour PM_{2.5} and federal 1-hour NO₂ and SO₂ standards according to the forms of these standards, from the prior three years (2021-2023). Note that because 2023 PM₁₀ monitoring data was unavailable for the 9925 International Boulevard, Oakland monitoring station, the highest concentrations for the years 2020-2022 were used instead. The background PM₁₀ concentrations are shown in **bold** because they already exceed the corresponding limiting standards. The total impact column shows the sum of the existing background condition plus the maximum impact predicted by the modeling analysis for construction. The limiting standard column combines CAAQS and NAAQS, whichever is more stringent.

TABLE 5.3-7 MAXIMUM AMBIENT AIR QUALITY IMPACTS DURING CONSTRUCTION
($\mu\text{g}/\text{m}^3$)

Pollutant	Averaging Time	Project Impact	Background	Total Impact	Limiting Standard	Percent of Standard
PM ₁₀ ^a	24-hour	14.19	137.1	151.3	50	303%
	Annual	2.77	21.3	24.1	20	120%
PM _{2.5}	24-hour	1.96	20.6	22.6	35	64%
	Annual	0.68	7.6	8.3	9	92%
CO	1-hour	26.4	2,634	2660	23,000	12%
	8-hour	13.4	1,489	1502	10,000	15%
NO ₂ ^b	State 1-hour	4.15	93.1	97.3	339	29%
	Federal 1-hour	3.18	69.7	72.9	188	39%
	Annual	0.28	16.7	17.0	57	30%
SO ₂	State 1-hour	0.06	28.5	28.6	655	4%
	Federal 1-hour	0.05	8.6	8.7	196	4%
	24-hour	0.01	3.1	3.2	105	3%

Notes: Concentrations in **bold** type are those that exceed the limiting ambient air quality standard.

a Because 2023 PM₁₀ monitoring data was unavailable for the 9925 International Boulevard, Oakland monitoring station, the highest concentrations for the years 2020 to 2022 were used instead.

b 1-hour and annual NO₂ impacts are evaluated assuming full conversion of NO_x to NO₂. The state 1-hour NO₂ total impacts include the maximum modeled project impact combined with maximum NO₂ background value. For the federal 1-hour NO₂ standard, staff conservatively combined the maximum modeled project impact with the 3-year average of 98th percentile daily maximum 1-hour background NO₂ to get the total NO₂ impact.

Sources: DayZenLLC 2023a, CEC staff analysis.

Table 5.3-7 shows that the impacts from project construction would be below the limiting standards for CO, NO₂, and SO₂. **Table 5.3-7** also shows that the existing 24-hour and annual PM₁₀ background concentrations are already above the CAAQS. The project would therefore contribute to existing exceedances of the 24-hour and annual PM₁₀ CAAQS. The modeled 24-hour PM₁₀ concentration of 14.19 $\mu\text{g}/\text{m}^3$ from project construction would exceed the U.S. EPA PM₁₀ SILs of 5 $\mu\text{g}/\text{m}^3$ for 24-hour impacts, and the maximum modeled annual PM₁₀ concentration of 2.77 $\mu\text{g}/\text{m}^3$ would also exceed the PM₁₀ SILs of 1 $\mu\text{g}/\text{m}^3$ for annual impacts. Because this impact is driven by fugitive dust sources, the maximum modeled PM₁₀ impacts during construction would occur at or near the project fence line and would decrease rapidly with increasing distance from

the fence line. For any location more than 236 feet of the fence line, the 24-hour PM₁₀ impacts would be below the U.S. EPA PM₁₀ SILs of 5 µg/m³. For any location more than 180 feet of the fence line, the annual PM₁₀ impacts would be below the annual PM₁₀ SILs of 1 µg/m³. The nearest residential receptors are located 2,985 feet north-northwest of the project boundary and the maximum annual PM₁₀ impacts at these receptors would be much lower than the PM₁₀ SILs. In addition, construction is considered short-term and the impacts during construction would be reduced with the implementation of **AQ-1**. With mitigation, the PM₁₀ impacts of the project during construction would be less than significant.

The maximum 24-hour PM_{2.5} impacts of 1.67 µg/m³ would exceed the 24-hour PM_{2.5} SILs of 1.2 µg/m³. However, the maximum modeled 24-hour PM_{2.5} impact would occur at the project fence line and would decrease rapidly with distance from the fence line. **Table 5.3-7** shows that the PM_{2.5} background for the last three years of available data (2021-2023) were lower than the limiting standards. However, the SFBAAB is still classified as nonattainment for PM_{2.5} CAAQS and NAAQS. Therefore, the project would contribute to existing regional exceedances of the PM_{2.5} AAQS. The maximum 24-hour PM_{2.5} impacts of 1.96 µg/m³ would exceed the 24-hour PM_{2.5} SILs of 1.2 µg/m³. The annual average PM_{2.5} impact during construction of 0.68 µg/m³ would exceed the BAAQMD significance threshold of 0.3 µg/m³ and the annual PM_{2.5} SILs of 0.13 µg/m³. However, the maximum modeled PM_{2.5} impacts would occur at the project fence line and would decrease rapidly with distance from the fence line. For any location more than 89 feet of the fence line, the 24-hour PM_{2.5} impacts would be below the 24-hour PM_{2.5} SILs of 1.2 µg/m³. For any location more than 485 feet of the fence line, the annual PM_{2.5} impacts would be below the annual PM_{2.5} SILs of 0.13 µg/m³. The nearest sensitive receptors are located 2,985 feet north-northwest of the project boundary and the maximum PM_{2.5} impacts at these receptors would be much lower than the U.S. EPA 24-hour PM_{2.5} SIL of 1.2 µg/m³, the BAAQMD significance threshold of 0.3 µg/m³ and U.S. EPA annual PM_{2.5} SILs level of 0.13 µg/m³. The PM_{2.5} impacts of the project during construction would be less than significant.

Project construction would not expose sensitive receptors to substantial criteria pollutant concentrations, and this impact would be less than significant.

Operation

Less Than Significant Impact. The AQIA for project operation includes emissions from the project's diesel gensets during readiness testing and maintenance use to compare worst-case ground-level impacts with established state and federal AAQS. No other on-site stationary emission sources, such as natural gas combustion devices, are proposed. The applicant's modeling analysis is described in more detail below.

The applicant's AQIA compares worst-case ground-level impacts resulting from the project operation with established state and federal AAQS. Staff reviewed the applicant's dispersion modeling files, and staff agrees with the inputs used by the

applicant and the outputs from the model for the AQIA, except for the 1-hour NO₂ NAAQS analysis as described in detail below.

Modeling Assumptions. Stack parameters (e.g., stack height, exit temperature, stack diameter, and stack exit velocity) were based on the parameters given by the engine manufacturer and the applicant. The project would include 27 diesel-fired backup generators arranged in a generation yard located on the northwest side of the data center and one smaller 175-kW diesel-fired generator located on the east side of the property. The design includes redundancy so that two of the generators are redundant (DayZenLLC 2024I). The 26 2.75-MW engines will be stacked in pairs with a stack height of 90 feet above ground level, while the remaining one 1-MW and one 175-KW engines would be staged at ground level (DayZenLLC 2024I).

All engines could be tested or used at any load condition. The applicant's analysis is supported by a screening review of engines at four different load conditions representing 25, 50, 75, and 100 percent load settings to determine that the worst-case concentrations occur during 100 percent load (DayZenLLC 2023c, Appendix AQ2). The application assumes that only one generator would undergo readiness testing and maintenance at a time, and that no more than 10 engines would be tested in one day. However, modeling inputs assume that each engine would operate for 10 hours in a day (between the hours of 7AM and 5PM), to conservatively represent 10 different engines one hour each day for the 3-hour, 8-hour, and 24-hour averaging times (DayZenLLC 2023a).

NO_x emissions during readiness and maintenance testing assumed a composite emission factor where the engine would warm up from an uncontrolled Tier 2 state during the first 15 minutes to a fully controlled Tier 4 state for the remainder of the one-hour test (DayZenLLC 2023a).

Refined Modeling Analyses. The modeling considers the use of the diesel-fired gensets in all proposed readiness testing and maintenance scenarios. The AQIA for project operation includes generator operating assumptions that vary depending on the averaging period of the applicable CAAQS or NAAQS. Refined modeling for all 1-hour averaging periods considers each single generator could be used at 100 percent load.

Modeling for comparison to the short-term NAAQS follows the applicable multi-year statistical forms (one-hour NO₂ and SO₂ and 24-hour PM_{2.5}). Similarly, for the 1-hour NO₂ and SO₂ CAAQS impacts analyses, the applicant reported the highest 1-hour NO₂ and SO₂ modeled concentrations in a manner consistent with the forms of the CAAQS.

Modeled 1-hour NO₂ concentrations reflect use of the ARM2 method, which assumes an ambient equilibrium between NO and NO₂, as a second-tier approach for NO₂ analysis as defined in U.S. EPA's *Guideline on Air Quality Models* (U.S. EPA 2024d). The approach uses a default minimum ambient NO₂/NO_x ratio of 0.5 and a maximum ambient ratio of 0.9.

For analysis relative to the state one-hour NO₂ standard, the maximum modeled 1-hour NO₂ results from AERMOD using ARM2 are added to the maximum 1-hour background NO₂ value from the 1100 21st Street monitoring site (2021-2023) to arrive at the total NO₂ impact to compare with the 1-hour NO₂ CAAQS (DayZenLLC 2023a). Staff's review for the state 1-hour NO₂ standard confirmed the applicant's ARM2 runs as being representative of worst-case NO₂ 1-hour results. For the 1-hour NO₂ NAAQS analysis, the applicant used EPA annualized emissions methodology to represent the intermittent testing operations (DayZenLLC 2023a).

Table 5.3-8 shows the maximum impacts from project operation, including readiness testing and maintenance. The project impact column shows the worst-case impacts of the project from modeling. The background column shows the highest concentrations, or the 3-year averages of the highest concentrations for 24-hour PM_{2.5} and federal 1-hour NO₂ and SO₂ standards according to the forms of these standards, from the prior three years (2021-2023). Note that because 2023 PM₁₀ monitoring data was unavailable for the 9925 International Boulevard, Oakland monitoring station, the highest concentrations for the years 2020-2022 were used instead. The background PM₁₀ concentrations are shown in **bold** because they already exceeded the corresponding limiting standards. The total impact column shows the sum of the existing background condition plus the maximum impact predicted by the modeling analysis for readiness testing and maintenance. The limiting standard column combines CAAQS and NAAQS, whichever is more stringent.

Pollutant	Averaging Time	Project Impact	Background	Total Impact	Limiting Standard	Percent of Standard
PM ₁₀ ^a	24-hour	0.49	137.1	137.6	50	275%
	Annual	0.05	21.3	21.4	20	107%
PM _{2.5}	24-hour	0.42	20.6	21.0	35	60%
	Annual	0.05	7.6	7.7	9	85%
CO	1-hour	408	2,634	3,042	23,000	13%
	8-hour	123	1,489	1,612	10,000	16%
NO ₂ ^b	State 1-hour	138.7	93.1	231.8	339	68%
	Federal 1-hour	1.59	69.7	71.3	188	38%
	Annual	3.78	16.7	20.5	57	36%
SO ₂	State 1-hour	0.78	28.5	29.3	655	4%
	Federal 1-hour	0.51	8.6	9.1	196	5%
	24-hour	0.11	3.1	3.3	105	3%

Notes: Concentrations in **bold** type are those that exceed the limiting ambient air quality standard.

a To compute the total impacts for the 24-hour PM_{2.5} NAAQS, staff conservatively combined the maximum modeled 24-hour PM_{2.5} impacts to the 3-year average of 98th percentile PM_{2.5} background.

b The NO₂ impacts are evaluated using the U.S. EPA Ambient Ratio Method 2 (ARM2) option in AERMOD with a minimum NO₂/NO_x ratio of 0.10, equivalent to the anticipated source's in-stack ratio.

c Impacts for the 1-hour statistical-based NO₂ and SO₂ NAAQS are based on the annual average emissions of the diesel-fired generators, per U.S. EPA guidance documents for intermittent sources (U.S. EPA 2011). Impacts for the 1-hour NO₂ and SO₂ CAAQS are based on the maximum 1-hour emission rates since these CAAQS are "values that are not to be exceeded."

Sources: DayZenLLC 2023a, CEC staff analysis.

Table 5.3-8 shows that the project's stationary sources would not cause exceedances of the CO, NO₂, or SO₂ standards. **Table 5.3-8** also shows that the existing PM₁₀ background concentrations are already above the limiting standards. The project would therefore contribute to existing exceedances of the PM₁₀ standards. **Table 5.3-8** shows that the PM_{2.5} background for the last three years of available data (2021-2023) were lower than the limiting standards. However, the SFBAAB is still classified as nonattainment for PM_{2.5} CAAQS and NAAQS. Therefore, the project would contribute to existing regional exceedances of the PM_{2.5} AAQS.

The modeled PM₁₀ concentrations from project operation in **Table 5.3-8** are well below the U.S. EPA PM₁₀ SILs of 5 µg/m³ for 24-hour impacts and 1 µg/m³ for annual impacts. The maximum modeled PM_{2.5} concentrations from project operation are well below the U.S. EPA PM_{2.5} SILs of 1.2 µg/m³ for 24-hour impacts, the project-level BAAQMD threshold for annual-average PM_{2.5} of 0.3 µg/m³ for risk and hazards, and the U.S. EPA PM_{2.5} SILs of 0.13 µg/m³ for annual impacts.

Table 5.3-8 shows that the project's diesel generators would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Localized CO Concentrations. Engine exhaust may elevate localized CO concentrations, resulting in "hot spots". Receptors exposed to these CO hot spots may have a greater likelihood of developing adverse health effects. CO hot spots are typically observed at heavily congested intersections where a substantial number of vehicles idle for prolonged durations throughout the day. BAAQMD screening guidance indicates that a project would not exceed the CO significance threshold if a project's traffic projections indicate traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour or at any affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (BAAQMD 2023).

The proposed project would generate vehicle trips to the site. These trips would include workers, material and equipment deliveries. It is unlikely that the addition of vehicle trips from the project on any roadway in the vicinity of the project site would result in an exceedance of the BAAQMD screening threshold. As a result, the additional vehicle trips associated with the project would result in a negligible effect on CO concentrations in the vicinity of the project site.

Table 5.3-7 and **Table 5.3-8** show the CO concentrations resulting from project construction and operation, and modeling results confirm that impacts would be below the limiting standards and BAAQMD significance thresholds of 20.0 ppm (23,000 µg/m³) for 1-hour average concentrations and 9.0 ppm (10,000 µg/m³) for 8-hour average concentrations.

Localized CO impacts during construction and operation, including readiness testing and maintenance, would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Cumulative Impacts for Criteria Pollutants

Under CEQA environmental checklist criterion “b” above, staff concludes that the project emissions would not exceed the BAAQMD significance thresholds with the implementation of staff’s proposed mitigation measure **AQ-1** to reduce impacts to the general population and sensitive populations during construction. The project’s NOx emissions would be fully offset for readiness testing and maintenance. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and these impacts to the general population and sensitive populations would be less than significant with mitigation incorporated.

Health Risk Assessment (HRA) for Toxic Air Contaminants

The Health Risk Assessment (HRA) for the project was conducted separately for (1) the period of project’s construction, and (2) the period of operation, including maintenance and readiness (M&R) testing. A separate discussion summarizes the risk and hazards for the project in a cumulative HRA that includes the project’s impact with the impacts of existing sources in the area.

The HRA estimated risks of cancer, non-cancer chronic exposure, and non-cancer acute exposure for residential, worker, and sensitive receptors, including (DayZenLLC 2023a, p. 96):

- Point of maximum impact (PMI) – this receptor represents the highest concentration and risk point on the receptor grid for the analysis under consideration.
- Maximum exposed individual resident (MEIR) receptor – this receptor represents the maximum impacted actual residential location on the grid for the analysis under consideration.
- Maximum exposed individual worker (MEIW) receptor – this receptor represents the maximum impacted actual worker location on the grid for the analysis under consideration.
- Maximum exposed individual sensitive (MEIS) receptor – this receptor represents the maximum impacted actual sensitive location on the grid for the analysis under consideration. This location is a non-residential sensitive receptor, i.e., school, hospital, daycare center, convalescent home, etc.

As required by the 2015 OEHHA Guidance, sensitive receptor (including residential) cancer risks were estimated assuming exposure beginning in the third trimester of pregnancy; worker cancer risk was estimated assuming an 8-hour-per-day, 250 day-per-year exposure, beginning at the age of 16 (OEHHA 2015).

Construction

Less Than Significant Impact. As mentioned above, construction activities would occur during a 22-month period (DayZenLLC 2023a, p. 71).

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust ([diesel particulate matter (DPM)]). These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at the nearest residences from construction emissions of DPM and PM_{2.5}. Emissions and dispersion modeling were conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated (DayZenLLC 2023a, p. 89).

In addition, during excavation, grading, and some building construction activities, substantial amounts of dust could be generated. Most of the dust would result during grading activities. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed at any given time, amount of activity, soil conditions, and meteorological conditions. To address fugitive dust emissions that lead to elevated PM₁₀ and PM_{2.5} levels near construction sites, the BAAQMD CEQA Air Quality Guidelines identify best management practices. Once included in construction projects, these impacts would be considered less than significant (DayZenLLC 2023a, p. 90). Therefore, fugitive dust emissions were excluded from the HRA, as they are not expected to include DPM.

The only TAC evaluated in the HRA for construction activities was DPM, which is a surrogate for diesel exhaust. DPM was assumed equal to estimated onsite and offsite exhaust PM₁₀ emissions. Therefore, exhaust PM₁₀ is used to represent DPM. There are no DPM emissions associated with fugitive emissions (DayZenLLC 2023a, Table 4.3-6). Since DPM has no acute REL, acute HI values were not calculated in applicant's HRA (DayZenLLC 2023a, p. 95).

Staff reviewed the applicant's modeling files and agreed with the inputs used by the applicant and the outputs from the model for carcinogenic and chronic health risks. The results of the construction HRA are presented in **Table 5.3-9**, which shows that the excess cancer risks and chronic HIs at the Maximum Exposed Individual Resident (MEIR), Maximum exposed individual sensitive receptor (MEIS), and Maximum Exposed Individual Worker (MEIW) would be less than the BAAQMD's significance thresholds. Therefore, staff concluded that the health risks of the project construction would be a less than significant impact.

TABLE 5.3-9 CONSTRUCTION – MODELED RECEPTOR MAXIMUM HEALTH RISK

Receptor Type	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)
MEIR ¹	0.0523	3.6E-05	NA
MEIS ²	0.00582	4E-06	NA
MEIW ³	0.089	1.12E-03	NA
BAAQMD Threshold	6 ⁴ or 10	1	1

Notes:

- 1 Maximum Exposed Individual Resident (MEIR). It is at the residence located about 0.75 miles east of the project boundary.
 - 2 Maximum Exposed Individual Sensitive Receptor (MEIS). It is at the Eden Gardens Elementary School, which is about 0.8 miles northeast of the project boundary.
 - 3 Maximum Exposed Individual Worker (MEIW). It is located on the southeast fence line.
 - 4 For designated overburdened communities, the 6 in one million risk threshold was used for both worker and sensitive (residential) receptors.
- Source: DayZenLLC 2023a, Table 4.3-20.

It should be noted that the risk values shown in **Table 5.3-9** are the highest of those modeled for each type of sensitive receptors. The risk values at other locations for each type of sensitive receptors would be lower than those shown in **Table 5.3-9**. Health risks at nearby worker/residential/sensitive receptors would all be below the significance thresholds. The health risks from project construction would be less than significant, and no mitigation would be necessary.

Operation

Less Than Significant Impact. During routine maintenance and readiness (M&R) testing, criteria pollutants and TACs (as DPM) would be emitted directly from the generators. DPM emissions resulting from diesel stationary combustion were assumed equal to PM10 emissions (DayZenLLC 2023a, p. 74). PM10 was used to represent DPM and was the only TAC considered to result from operation of the SVY03A (DayZenLLC 2023a, p. 73). DPM is the approved surrogate compound for diesel fuel combustion for purposes of health risk assessment.

Annual emissions for each engine are based on the maximum allowed runtime of 50 hours per year (DayZenLLC 2023a, Table 4.3-11). 50 hours per year per engine is the limit specified by the Airborne Toxic Control Measure for Stationary Toxic Compression Ignition Engines (Cal. Code Regs., tit.17, Section 93115). However, it is the applicant's experience that each engine will be operated for considerably less than 50 hours a year (DayZenLLC 2023a, p. 74).

Maintenance and readiness testing usually occurs at loads ranging from 10 to 100% load. For purposes of this application, the total emissions and modeled impacts were based upon the 100% load case. Each of the Tier 4-compliant engines were evaluated for the following emissions scenarios (DayZenLLC 2023a, p. 74):

- Emergency Operations - Declared emergency operations, 100 hrs/yr, Tier 4 emissions factors, 100% load, with add-on controls including DPFs. (BAAQMD Policy limit.) These emissions are not subject to NSR applicability.
- Maintenance and Readiness Testing - Maintenance/Readiness operations, 50 hrs/yr, Tier 4 emissions factors supplemented by Tier 2 emissions factors to account for startup periods, 100% load, with add-on controls including DPFs. (ATCM limit.)

Air would be the dominant pathway for public exposure to chemical substances released by the project. Emissions to the air would consist primarily of combustion by-products produced by the diesel-fired emergency standby engines. Potential health risks from combustion emissions would occur almost entirely by direct inhalation. To be conservative, additional pathways were included in the health risk modeling (DayZenLLC 2023a, p. 93). Applicant's HRA included potential health impacts from TAC exposure on receptors through the following pathways: inhalation, soil ingestion, dermal absorption, mother's milk and homegrown produce (HARP modeling files).

The risk assessment was conducted in accordance with guidance established by the California Office of Environmental Health Hazard Assessment (OEHHA 2015) and the California Air Resources Board. The operational HRA assumed a conservative 30-year continuous exposure duration for residential and sensitive receptors and a 25-year exposure duration for workers (OEHHA 2015) (HARP modeling files).

The operational HRA modeling was conducted using CARB's HARP2 Air Dispersion Modeling and Risk Assessment Tool (ADMRT). To facilitate calculation of long-term TAC ground-level concentrations at each modeled receptor, the AERMOD air dispersion modeling output plot files were imported into HARP. The applicant reran the AERMOD for criteria pollutants only with the new 175 BHP engine (Tier 3) by itself to compare it with the older 2,400 BHP engine (Tier 4), but didn't update the HRA (DayZenLLC 2024m). Staff reran the HARP2 to get the updated risk numbers.

The results of the operation of the standby generators are presented in **Table 5.3-10**. **Table 5.3-10** shows that the cancer risks and chronic HIs at the MEIR, MEIS, and MEIW during operation would be less than the BAAQMD's significance thresholds of 10 in one million and 1, respectively. It should be noted that the risk values shown in **Table 5.3-10** are the highest of those modeled for each type of sensitive receptors. The risk values at other locations for each type of sensitive receptors would be lower than those shown in **Table 5.3-10**. Therefore, staff concluded that the health risks of the project operation would be a less than significant impact.

TABLE 5.3-10 OPERATION – MODELED RECEPTOR MAXIMUM HEALTH RISK

Receptor Type	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)
MEIR ¹	1.13	3.32E-04	NA
MEIS ²	0.0886	2.6E-05	NA
MEIW ³	0.90	9.91E-03	NA
BAAQMD Threshold	6 ⁴ or 10	1	1

Notes:

1 Maximum Exposed Individual Resident (MEIR). It is at the residence located about 0.75 miles east of the project boundary.

2 Maximum Exposed Individual Sensitive Receptor (MEIS). It is at the Eden Gardens Elementary School, which is about 0.8 miles northeast of the project boundary.

3 Maximum Exposed Individual Worker (MEIW). It is located on the east fence line.

4 For designated overburdened communities, the 6 in one million risk threshold was used for both worker and sensitive (residential) receptors.

Sources: CEC staff analysis, DayZenLLC 2023a, Table 4.3-21 and 4.3-22.

Cumulative HRA

Less Than Significant Impact. This discussion addresses the impacts from cumulative sources in comparison to the BAAQMD thresholds of significance for risk and hazards from cumulative sources (BAAQMD, 2017b). This cumulative HRA is an assessment of the project's impact summed with the impacts of existing sources within 1,000 feet of the project. The results of this cumulative HRA are compared to the BAAQMD CEQA cumulative thresholds of: no more than 100 cancer cases per million; a chronic Hazard Index of no more than 10.0; and PM_{2.5} concentrations of no more than 0.8 µg/m³ annual average PM_{2.5} concentrations.

Per staff's request in Data Request 11, the applicant provided a cumulative HRA and compared results with the BAAQMD threshold of significance for cumulative risk and hazards (DayZenLLC 2024a). The applicant used the BAAQMD CEQA Air Quality Guidelines and available on-line tools⁸ to determine the appropriate sources for inclusion in the cumulative HRA. Sources identified within 1,000 feet of the proposed Project boundary are some stationary sources and State Route 92.

The applicant's cumulative HRA shows that the maximum cumulative cancer risk for MEIR would be 2.715 in one million, below the threshold of 100 in one million; the maximum cumulative HI would be 0.027, below the threshold of 10; and the maximum cumulative PM_{2.5} concentration would be 0.653 µg/m³, below the threshold of 0.8 µg/m³ (DayZenLLC 2024a, Table 3)

Staff also conducted an independent cumulative HRA, which is an assessment of the proposed project's impact summed with the impacts of existing sources within 1,000

⁸ <https://www.baaqmd.gov/en/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools/health-risk-screening-and-modeling>

feet⁹ of the maximum exposed sensitive receptors, including PMI, MEIR, MEIW and MEIS. The results of staff's cumulative HRA are compared to the BAAQMD CEQA cumulative thresholds of significance (BAAQMD 2017b) in **Table 5.3-11**, **Table 5.3-12**, and **Table 5.3-13**. Staff's cumulative HRA includes four major sources of impacts: (1) existing stationary sources; (2) surrounding highways, main streets, and railways (including State Route 237); and (3) the proposed project. The Hayward Executive Airport is located more than 2,000 feet (approximately 1-3/4 miles) northeast of the site (DayZenLLC 2024I, Section 2.2.1) and therefore is not included in the cumulative HRA.

1. Existing Stationary Sources

The cumulative cancer risk, non-cancer hazard index, and PM2.5 concentrations of existing stationary sources were first retrieved from BAAQMD'S Permitted Sources Risk and Hazards Map.¹⁰ Then the risks were calculated using BAAQMD's Health Risk Calculator with Distance Multipliers¹¹ to refine screen-level cancer risk, non-cancer health hazard index, and PM2.5 concentrations. The Health Risk Calculator incorporates factors such as risk associated with individual toxic air contaminants emitted from an existing stationary source and how far a stationary source is from the proposed project's maximum exposed sensitive receptor locations to calculate overall cancer risk, hazard index, and PM2.5 concentration from a stationary source.

Staff searched the risk data for existing stationary sources within 1,000 feet of PMI, MEIR, MEIW, and MEIS locations. Except for PMI and MEIW, there is no stationary source within 1,000 feet of MEIR and MEIS.

2. Surrounding Highways, Main Streets, and Railways

Highway 92 is located just north of the site (DayZenLLC 2024I, Section 2.2.1). The cancer risk, chronic hazard and PM2.5 concentration from surrounding highways, major streets and railways were downloaded from BAAQMD¹² roadway screening data layers. The roadway screening data layers provide estimated cancer risks, hazards, and PM2.5 concentrations for all Bay Area highways and surface streets.

3. The Proposed Project

For the proposed project, please see the result of the HRA for facility wide operation of STACK SVY03A presented in **Table 5.3-10**.

⁹ Per the BAAQMD CEQA Guidelines, the zone of influence for the cumulative threshold is 1,000 feet from the source or receptor.

¹⁰ The BAAQMD Permitted Sources Risk and Hazards Map can be accessed here:

<https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3>

¹¹ The BAAQMD Health Risk Calculator with Distance Multipliers Beta 5.0 can be downloaded here:

https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/tools/public-baaqmd-health-risk-calculator-beta-5-0-xlsx-xlsx.xlsx?rev=78c153babffa426ba9ca15a31776e035&sc_lang=en

¹² Ibid. 1

Table 5.3-11, Table 5.3-12, and Table 5.3-13 summarize the results of the staff cumulative HRA and compares them to the BAAQMD thresholds of significance for cumulative risk and hazards. The cumulative cancer risk, hazard index, and PM2.5 concentration were conservatively calculated using the maximum value in relation to the maximum exposed sensitive receptors as well as at the nearest residences. **Table 5.3-11** and **Table 5.3-12** show that the proposed project's health risks (i.e. cumulative cancer risk, hazard index) would not exceed the cumulative health risk thresholds when summed with the health risks of cumulative sources within 1,000 feet of each maximum exposed sensitive receptors or the nearest residences. **Table 5.3-13** shows that the proposed project's health risks (i.e. PM2.5 concentration) would not exceed the cumulative health risk thresholds when summed with the health risks of cumulative sources within 1,000 feet of each maximum exposed sensitive receptors or the nearest residences.

TABLE 5.3-11 CANCER RISKS (PER MILLION) FROM CUMULATIVE SOURCES

Sources of Cumulative Impacts	Cancer Risk (PMI)	Cancer Risk (MEIR)	Cancer Risk (MEIS)	Cancer Risk (MEIW)
Existing Stationary Sources ^a	0.0034	0	0	0.0034
Surrounding Highways, Major Streets, and Railways (State Route 92) ^b	12.94	20.03	8.83	12.94
STACK SVY03A	33.8	1.13	0.0886	0.9
Total - Cumulative Sources	46.75	21.16	8.92	13.85
Significance Threshold	100	100	100	100
Potential Significant Impact?	No	No	No	No

Notes:

a Staff conducted a thorough search on BAAQMD's Permitted Stationary Sources Risk Hazards for the stationary sources within 1,000 ft of PMI, MEIR, MEIS and MEIW. Stationary sources were only found around PMI and MEIW.

b Staff used the data provided by BAAQMD.

Sources: Energy Commission staff analysis of data from BAAQMD.

TABLE 5.3-12 CHRONIC HAZARD INDICES FROM CUMULATIVE SOURCES

Sources of Cumulative Impacts	Chronic Hazard Index (PMI)	Chronic Hazard Index (MEIR)	Chronic Hazard Index (MEIS)	Chronic Hazard Index (MEIWS)
Existing Stationary Sources ^a	0	0	0	0
Surrounding Highways, Major Streets, and Railways (State Route 92) ^b	0.0299	0.0593	0.0278	0.0299
STACK SVY03A	0.00991	0.00033	0.00003	0.00991
Total - Cumulative Sources	0.04	0.06	0.028	0.04
Significance Threshold	10	10	10	10
Potential Significant Impact?	No	No	No	No

Notes:

a Staff conducted a thorough search on BAAQMD's Permitted Stationary Sources Risk Hazards for the stationary sources within 1,000 ft of PMI, MEIR, MEIS, and METW. Stationary sources were only found around PMI and MEIW.

b Staff used the data provided by BAAQMD.

Sources: Energy Commission staff analysis of data from BAAQMD.

TABLE 5.3-13 ANNUAL PARTICULATE MATTER (PM2.5) CONCENTRATIONS ($\mu\text{g}/\text{m}^3$) FROM CUMULATIVE SOURCES

Sources of Cumulative Impacts	Annual DPM/PM2.5 Concentration			
	(PMI)	(MEIR)	(MEIS)	(MEIW)
Existing Stationary Sources ^a	0.01	0	0	0.01
Surrounding Highways, Major Streets, and Railways ^b	0.0212	0.3516	0.2314	0.212
STACK SVY03A ^c	0.05	0.05	0.05	0.05
Total - Cumulative Sources	0.272	0.4	0.2814	0.272
Significance Threshold	0.8	0.8	0.8	0.8
Potential Significant Impact?	No	No	No	No

Notes:

a Staff conducted a thorough search on BAAQMD's Permitted Stationary Sources Risk Hazards for the stationary sources within 1,000 ft of PMI, MEIR, MEIS, and MEIW. Stationary sources were only found around PMI and MEIW.

b Staff used the data provided by BAAQMD.

c Staff conservatively assumed that the worst-case modeled PM2.5 impacts shown in **Table 5.3-8** would occur at the sensitive receptors. Sources: Energy Commission staff analysis of data from BAAQMD.

Evaluating Emergency Operations

This section addresses the potential for emergency situations that could trigger unplanned operation of the project's diesel-fired administrative generators. Emergency use of the generators could occur in the event of a power outage or other disruption, upset, or instability that triggers a need for emergency backup power at the data center.

The air quality impacts of standby generator operation during emergencies are not quantified below because the impacts of emergency operations are typically not evaluated during facility permitting and local air districts do not normally conduct an air quality impact assessment of such impacts. CEC staff assessed the likelihood of emergency events but finds that modeling the air quality impacts of emergency operations would require a host of unvalidated, unverifiable, and speculative assumptions about when and under what circumstances such a hypothetical emergency would occur. Such a speculative analysis is not required under CEQA (CEQA Guidelines, Cal. Code Regs., Tit.14, §§ 15064(d)(3) and 15145), and, most importantly, would not provide meaningful information by which to determine project impacts.

Emissions that occur during the emergency use of the generators would not occur on a regular or predictable basis (see **Appendix B** for more information). During the

permitting process, the BAAQMD policy requires facilities to presume that each of their backup power generators will experience 100 hours per year of emergency operation when calculating their PTE for determining the applicability of certain permitting regulations (BAAQMD 2019).

Scoping comments on a previous similar project (e.g. the CA3 Data Center project) from BAAQMD provided a review of data centers that initiated operation of diesel engines for “non-testing/non-maintenance” purposes, for the purpose of informing staff’s consideration of scenarios of backup power generation operations beyond routine testing and maintenance (BAAQMD 2021a).

Staff reviewed these BAAQMD comments regarding the use of diesel engines for “non-testing/non-maintenance” purposes and confirmed that these types of events are infrequent, irregular, and unlikely and the resulting emissions are not easily predictable or quantifiable (see **Appendix B** for more information). The BAAQMD comments identified extended durations of standby generator engine use occurred for “non-testing/non-maintenance” purposes, mostly due to extreme events within the 13-month record of the data. The 13-month period of BAAQMD’s review (September 1, 2019 to September 30, 2020) included the implementation of PG&E’s Public Safety Power Shutoff (PSPS), severe wildfires, several California Independent System Operator (CAISO)-declared emergencies, and winter storms. Including usage during the extreme events, 1,877 engine-hours of diesel engine use occurred at 20 data centers for “non-testing/non-maintenance” purposes (less than half of the 45 facilities included in the review, and less than a third of such facilities under BAAQMD’s jurisdiction at the time of data collection) during the surveyed 13-month period. BAAQMD’s review covered 288 individual diesel engines that operated over a 13-month record. Because the backup generator engines were collectively available for over 2.74 million engine-hours during the 13-month period (288 engines * 9,504 hours in the 13-month record), and they were used for “non-testing/non-maintenance” purposes for 1,877 engine-hours, at those facilities where operation occurred, the engines entered into emergency operations during 0.07 percent of their available time (1,877 / 2.74 million). Staff’s analysis of the BAAQMD’s information found that the average runtime for each diesel backup generator engine per event in BAAQMD’s review was approximately 5.0 hours. Based on this data, staff determined that the emergency use of the standby generator engines was infrequent and of short duration.

Due to the number of factors that need to be considered, using an air quality model to evaluate ambient air quality impacts during emergency operations would require substantial and inappropriate speculation and would render the results of any such exercise too speculative to be meaningful. This remains especially true when neither the CEC nor any other agency known to CEC has established or used in practice a threshold of significance by which to interpret air quality modeling results from emergency operations. Emergency operation would be very infrequent, and emergency operations would not occur routinely during the lifetime of the facility. Accordingly, the potential

for any adverse impacts to ambient air quality concentrations would be a very-low probability event.

Thus, staff concludes that assessing the impacts of emergency operation of the gensets would be speculative due to the infrequent, irregular, and unplanned nature of emergency events. Emissions and impacts during emergency operation are not objectively predictable or quantifiable.

Because of the infrequent nature of emergency conditions and the reliability of the grid as detailed in **Appendix B**, the project's emergency operation would be unlikely to expose sensitive receptors to substantial concentrations of pollutants.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

This section considers impacts may arise from emissions other than criteria air pollutants and TACs, such as emissions that may lead to odors.

The BAAQMD states that, while offensive odors rarely cause direct health impacts or any physical harm, they still can be very unpleasant and lead to considerable distress among the public, often generating citizen complaints to local governments and the BAAQMD (BAAQMD 2017b). Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact. Odor impacts on residential areas and other sensitive receptors warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

The BAAQMD CEQA guidelines recommend a two-step process for determining the significance of potential odor impacts. First, determine whether the project would result in an odor source affecting receptors within the distances indicated in **Table 5.3-11**. Second, if the proposed project would result in an odor source and receptors within the screening level distances indicated in **Table 5.3-11**, a more detailed analysis should be conducted (BAAQMD 2017b).

TABLE 5.3-11 PROJECT SCREENING TRIGGER LEVELS FOR POTENTIAL ODOR SOURCES

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles

TABLE 5.3-11 PROJECT SCREENING TRIGGER LEVELS FOR POTENTIAL ODOR SOURCES

Land Use/Type of Operation	Project Screening Distance
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles

Source: BAAQMD 2017b, Table 3-3.

The project is not a type of operation that is classified as a typical odor source by the BAAQMD, as in **Table 5.3-11**. The diesel engine generators would not be stationary sources of a type that are typically known to cause significant odor impacts.

Construction

Less Than Significant Impact. Minor odor sources during construction activities include diesel exhaust from heavy-duty equipment. Odors from construction activities near existing receptors would be temporary in nature and dissipate as a function of distance. Accordingly, construction of the project is not expected to result in substantial emissions that may lead to odor impacts or impacts of emissions other than those of criteria air pollutants and TACs identified elsewhere in this analysis. Therefore, construction of the project would not result in odors or other emissions that could adversely affect a substantial number of people, and construction would have a less than significant impact related to odors.

Fugitive dust emissions can also create a nuisance that can cause adverse effects. The project is proposing to comply with the BAAQMD construction fugitive dust control BMPs and so should not have substantial fugitive dust emissions during construction that could adversely affect a substantial number of people.

Therefore, the construction of the project would not result in other emissions, such as those leading to odors, that could adversely affect a substantial number of people and would have a less than significant impact.

Operation

Less Than Significant Impact. Potential odor sources from project operation would include the diesel exhaust from readiness testing and maintenance along with emergency operation of the backup generators, trash pick-up and other heavy-duty delivery vehicles, and the occasional use of architectural coatings during routine maintenance. When compared to existing odor sources near the project site, which include heavy and light industrial uses, odor impacts from project readiness testing and maintenance along with emergency operations would be similar.

Once built and operating, the project would have no notable emissions other than those of criteria air pollutants and TACs identified elsewhere in this analysis. Therefore, nuisance impacts would not be likely to occur during operation, including readiness

testing and maintenance or emergency operation. During readiness testing and maintenance and during emergency operation, the project would not result in odors or other emissions that could adversely affect a substantial number of people and would have a less than significant impact related to odors. In conclusion, staff finds that the project would not likely create objectionable odors affecting a substantial number of people and impacts would be less than significant.

5.3.3 Mitigation Measures

AQ-1: To incorporate the Bay Area Air Quality Management District (BAAQMD) recommendations for Best Management Practices to control fugitive dust, the project owner shall implement a construction emissions control plan that has been reviewed and approved by the Director or Director's designee of the City of Hayward Development Services Department prior to the issuance of any grading or building permits, whichever occurs earliest. The project owner shall implement the following measures during construction:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on onsite unpaved roads shall be limited to 5 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points.
- All off-road equipment greater than 25 horsepower (hp) shall have engines that meet or exceed Tier 4 final off-road emission standards. Use of zero-emission and hybrid-powered equipment is encouraged.

- Properly tune and maintain construction equipment in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Post a publicly visible sign with the telephone number and name of the person to contact regarding dust complaints and the BAAQMD telephone number. The contact person shall implement corrective measures, as needed, within 48 hours, and the BAAQMD shall be informed of any legitimate complaints received to verify compliance with applicable regulations.

5.3.4 References

- BAAQMD 2017 – Bay Area Air Quality Management District (BAAQMD). Final 2017 Clean Air Plan, Adopted April 19, 2017. Accessed September 2024. Accessed online at: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf
- BAAQMD 2019 – Bay Area Air Quality Management District (BAAQMD). Calculating Potential to Emit for Emergency Backup Power Generators. Dated June 3, 2019. Accessed September 2024. Accessed online at: http://www.baaqmd.gov/~media/files/engineering/policy_and_procedures/banking-and-offsets/calculating-pte-for-emergency-generators-06032019-pdf
- BAAQMD 2020 – BACT / TBACT Workbook, Document: 96.1.5. Dated December 22, 2020. Accessed July 2024. Accessed online at: <https://www.baaqmd.gov/permits/permitting-manuals/bact-tbact-workbook>
- BAAQMD 2021a – Bay Area Air Quality Management District Comments (BAAQMD). (TN 239805). Letter for CA3 Data Center NOP, dated September 21, 2021. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01>
- BAAQMD 2021b – Bay Area Air Quality Management District (BAAQMD). Regulation 2 Permits Rule 5 New Source Review of Toxic Air Contaminants. Date December 15, 2021. Accessed September 2024. Accessed online at: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0205-pdf.pdf?la=en&rev=c403a2e96fde4799b1aa950cd4367aa2
- BAAQMD 2023 – Bay Area Air Quality Management District (BAAQMD). California Environmental Quality Act, Air Quality Guidelines. Updated April 2023. Accessed

- September 2024. Accessed online at: <https://www.baaqmd.gov/en/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>
- BAAQMD 2024a – Bay Area Air Quality Management District (BAAQMD). Air Quality Standards and Attainment Status. Accessed October 2024. Accessed online at: <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>
- BAAQMD 2024b – Bay Area Air Quality Management District (BAAQMD). 2024 Annual Air Monitoring Network Plan. Dated July 2, 2024. Accessed November 2024. Accessed online at: https://www.baaqmd.gov/~media/files/technical-services/air-monitoring-network-plans/2024_network_plan-pdf.pdf?rev=03780ced2a2a41909338416d1b2bc527&sc_lang=en
- CARB 1998 – California Air Resources Board (ARB). 1998. Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant. Appendix III, Part A, Exposure Assessment. June 1998. Accessed October 2024. Accessed online at: https://ww3.arb.ca.gov/toxics/dieseltac/part_a.pdf
- CARB 2013 – California Air Resources Board (CARB). The California Almanac of Emissions and Air Quality – 2013 Edition. Accessed September 2024. Accessed online at: <https://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm>
- CARB 2021 – California Air Resources Board. Low Emission Diesel (LED) Study: Biodiesel and Renewable Diesel Emissions in Legacy and New Technology Diesel Engines, Final Report – November 2021. Accessed May 6, 2024. Accessed Online at: <https://ww2.arb.ca.gov/resources/documents/low-emission-diesel-led-study-biodiesel-and-renewable-diesel-emissions-legacy>
- CARB 2024a – California Air Resources Board (CARB). California Air Quality Data Statistics (iADAM). Accessed October 2024. Accessed online at: <https://www.arb.ca.gov/adam/topfour/topfour1.php>
- CARB 2024b – California Air Resources Board (CARB). California Ambient Air Quality Standards. Accessed October 2024. Accessed online at: <https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards>
- CARB 2024c – California Air Resources Board (CARB). Accessed September 2024. Overview: Diesel Exhaust & Health. Accessed online at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>
- CARB 2025 – California Air Resources Board (CARB). Accessed January 2025. PM2.5 - California Air Resources Board. Accessed online at: <https://ww2.arb.ca.gov/our-work/programs/state-and-federal-area-designations/federal-area-designations/pm2-5>
- DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

- DayZenLLC 2023c – DayZenLLC (TN 252251). STACK SVY03A – SPPE Application – Appendices A and B, Part III of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2024a – DayZenLLC (TN 254405). STACK SVY03A Supplemental Data Responses Set 1, dated February 12, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2024m – DayZenLLC (TN 259547). STACK SVY03A Air Quality Modeling Memo, dated October 15, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2024l – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- Hayward 2014 – City of Hayward. Hayward 2040 General Plan, dated July 2014. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/Hayward-2040-General-Plan-Downloadable.pdf>
- NOAA 2019 – National Oceanic and Atmospheric Administration (NOAA). The Impact of Wildfires on Climate and Air Quality, An emerging focus of the NOAA ESRL Chemical Sciences Division. Accessed September 2024. Accessed online at: <https://www.esrl.noaa.gov/csd/factsheets/csdWildfiresFIREX.pdf>
- OEHHA 2015 – Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments, March 6, 2015. Accessed on: October 2024. Accessed online at: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>
- OEHHA 2024 – Office of Environmental Health Hazard Assessment (OEHHA). Toxic Air Contaminants. Accessed September 2024. Accessed online at: <https://oehha.ca.gov/air/toxic-air-contaminants>
- U.S. EPA 2002 – United States Environmental Protection Agency (U.S. EPA). Health Assessment Document For Diesel Engine Exhaust. May 2002. Accessed September 2024. Available online at: https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=36319&Lab=NCEA
- U.S. EPA 2011 – United States Environmental Protection Agency (U.S. EPA). Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard. March 2011. Accessed June 2020. Accessed online at: https://www3.epa.gov/ttn/scram/guidance/clarification/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf

- U.S. EPA 2013 – United States Environmental Protection Agency (U.S. EPA). Determination of Attainment for the San Francisco Bay Area Nonattainment Area for the 2006 Fine Particle Standard; California; Determination Regarding Applicability of Clean Air Act Requirements. Accessed September 2024. Accessed online at: <https://www.federalregister.gov/documents/2013/01/09/2013-00170/determination-of-attainment-for-the-san-francisco-bay-area-nonattainment-area-for-the-2006-fine>
- U.S. EPA 2014 – United States Environmental Protection Agency (U.S. EPA). EPA Finalizes Initial Area Designations for the 2012 National Air Quality Standard for Fine Particles - Dec 2014. Accessed September 2024. Accessed online at: <https://www.epa.gov/particle-pollution-designations/epa-finalizes-initial-area-designations-2012-national-air-quality>
- U.S. EPA 2018 – United States Environmental Protection Agency (U.S. EPA). Air Quality Designations for the 2010 Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard—Round 3. Accessed September 2024. Accessed online at: <https://www.govinfo.gov/content/pkg/FR-2018-01-09/pdf/2017-28423.pdf>
- U.S. EPA 2024a – United States Environmental Protection Agency (U.S. EPA). Supplement to the Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program, dated April 30, 2024. Accessed February 2025. Accessed online at: <https://www.epa.gov/system/files/documents/2024-04/supplement-to-the-guidance-on-significant-impact-levels-for-ozone-and-fine-particles-in-the-psd-permitting-program-4-30-2024.pdf>
- U.S. EPA 2024b – United States Environmental Protection Agency (U.S. EPA). NAAQS Table. Accessed October 2024. Accessed online at: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>
- U.S. EPA 2024c – United States Environmental Protection Agency (U.S. EPA). Pre-Generated Data Files, Annual Summary Data. Accessed October 2024. Accessed online at: https://aqs.epa.gov/aqsweb/airdata/download_files.html
- U.S. EPA 2024d – United States Environmental Protection Agency (U.S. EPA). 2024 Appendix W Final Rule, Accessed December 2024. Accessed online at: <https://www.epa.gov/scram/2024-appendix-w-final-rule>
- Van Gosen, B.S., and Clinkenbeard, J.P. 2011 – Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California: U.S. Geological Survey Open-File Report 2011-1188. Accessed March 2021. Accessed online at: <http://pubs.usgs.gov/of/2011/1188/>

5.4 Biological Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to biological resources that occur in the project area.

BIOLOGICAL RESOURCES				
Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.4.1 Environmental Setting

The proposed project would be located on approximately 11.3 acres in the city of Hayward within Alameda County. The project site is fully developed and consists of nine buildings, along with paved parking lots, used for office/warehouse/light-industrial purposes and ornamental landscaping (DayZenLLC 2023a). The project would include demolition of the existing buildings on site and construction of a three-story data center building, security building, and 28 supporting backup generators (DayZen 2024b). The

project would include an on-site project substation, a PG&E switching station, and an on-site transmission line.

The project site is in a developed area and is characterized by commercial and industrial development. The site is bordered by Eden Landing Road to the north, Production Avenue to the east, and Investment Boulevard to the south, while a connected parking lot extends to the west, adjacent to another industrial development. Two highways are located nearby, including CA-92 located approximately 300 feet north and Interstate 880 located approximately 1.8 miles to the east. The Hayward Executive Airport is located approximately 1.75 miles northeast of the project site.

Vegetation and Habitat

The project site contains a mix of native and non-native ornamental trees and shrubs, primarily along its boundaries (DayZenLLC 2023a). Seven tree species were identified onsite, with coast redwood (*Sequoia sempervirens*) the only native tree species, while the remaining species are non-native ornamental species. Native plants present on site include deergrass (*Muhlenbergia rigens*). However, this is used in ornamental plantings. There are no waterways, wetlands, or other sensitive habitats located on or adjacent to the project site (DayZenLLC 2023a). The nearest waterway, Mount Eden Creek, is located approximately 0.5 miles southwest and is a part of the Eden Landing Ecological Reserve, which includes wetlands, salt ponds, and marshes (DayZenLLC 2023a).

The project site provides suitable habitat for nesting and foraging birds and other urban adapted species of wildlife. The applicant's consultant, WRA conducted a reconnaissance-level survey for biological resources for the proposed project on June 22, 2023 (DayZenLLC 2023c). No native plant or wildlife species were detected during reconnaissance surveys. In addition, no small mammal burrows were observed on site during the surveys. Common wildlife, such as raccoons (*Procyon lotor*), Virginia opossums (*Didelphis virginiana*), house mouse (*Mus musculus*), and Norway or brown rats (*Rattus norvegicus*) often occur in developed areas and may forage on the site in landscaped areas (CDFW 2025a). Other urban adapted species such as American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*) and house finch (*Haemorrhous mexicanus*) may tolerate the conditions of disturbed habitats (Mayer & Laudenslayer, Jr. 1988). However, none of these species were observed during the reconnaissance survey.

Sensitive Natural Communities

The site does not contain natural community vegetation alliances as defined in A Manual of California Vegetation (Sawyer et al., 2009) or listed on the California Department of Fish and Wildlife (CDFW) California Natural Community List (CDFW 2025b). There are no sensitive natural communities on site or immediately adjacent to the project.

The project site is located near sensitive habitats, including the 6,400-acre Eden Landing Ecological Preserve and the Hayward Regional Shoreline, located approximately 0.5 miles and 0.75 miles from the project respectively. Across CA-92, these wetlands extend into the 100-square-mile Hayward Recreation and Park District, featuring open space, the Hayward Shoreline Interpretive Center, and the Hayward Regional Shoreline (HARD 2024). Northern coastal salt marsh, located at the Eden Landing Ecological Preserve, is known to support several special-status species of birds and mammals. Northern coastal salt marsh is considered a sensitive habitat by the California Department of Fish and Wildlife and is included as a sensitive natural community in the California Natural Diversity Database (CNDDB).

These restored wetlands support over 500 wildlife species, including 20 federally or state-listed threatened or endangered species (CDFW 2024). The area is part of the Pacific Flyway, hosting millions of migratory birds, as well as resident species like ruddy duck (*Oxyura jamaicensis*), Canada geese (*Branta canadensis*), and great blue heron (*Ardea herodias*) (U.S. EPA 2024). Tidal marshes serve as nurseries for anadromous fish and habitat for threatened and endangered species¹ like the salt-marsh harvest mouse (*Reithrodontomys raviventris*, FE, SE), western snowy plover (*Charadrius nivosus nivosus*; FT, SSC), and Ridgeway's rail (*Rallus obsoletus obsoletus*; FE, SE, FP). However, none of these listed species are expected to occur on site due to lack of suitable habitat.

The California Essential Habitat Connectivity Project, commissioned by Caltrans and CDFW, assessed statewide habitat connectivity for conservation and infrastructure planning (Spencer et al., 2010). It produced the Essential Connectivity Map, identifying large natural habitat blocks (Natural Landscape Blocks) and key ecological linkages (Essential Connectivity Areas). The project also highlighted Potential Riparian Connections—streams and rivers supporting terrestrial and aquatic connectivity. These maps focus on overall ecological integrity rather than specific species needs (CNDDB 2025). The Eden Landing Ecological Preserve is considered a California Essential Connectivity Area and Natural Landscape Block. In addition, Hayward Regional Shoreline is considered California Essential Connectivity Area - Natural Areas Small. In addition, the California Essential Connectivity Area mapped in CDFW BIOS identified a corridor 5 miles south of the project site along Alameda Creek (Gogol-Prokurat 2014). This corridor connects the Eden Landing Ecological Preserve to the Diablo Range.

Special Status Species

Special-status species are plant and wildlife species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Staff reviewed the results of queries from the USFWS Information for Planning and Consultation (IPaC)

1 Status Codes: State: SSC: California Species of Special Concern, SE: State-listed as endangered, ST: State-listed as threatened. SCE: State-listed as candidate; FP: State Fully Protected; WL: State Watch List species; Federal: FE: Federally listed as endangered; FT: Federally listed as threatened; BCC: Fish and Wildlife Service: Birds of Conservation Concern

species list, California Natural Diversity Database (CNDDDB) RareFind 5, California Native Plant Society (CNPS) Rare Plant Inventory, California Consortium of Herbaria, iNaturalist, eBird. No designated or proposed critical habitat for federally listed species exists within the project area (USFWS 2025a). Due to the developed nature of the project site and surrounding areas, the site does not provide habitat capable of supporting a diverse assemblage of native plants or wildlife. Based on the specialized habitat requirements for special-status plants potentially occurring in the region (such as vernal pools, marsh, riparian, chaparral, coastal scrub, or serpentine soils) no special-status plant species are expected to occur on site (CNDDDB 2025; CNPS 2024, Calflora 2024). In addition, most rare, threatened, endangered, and sensitive wildlife species are unlikely to occur due to a lack of suitable habitat and the highly disturbed and industrial nature of the site and its immediate surroundings. No special-status plant or wildlife species were observed during reconnaissance surveys.

There are several special-status wildlife species known to occur in the project vicinity, with both current and historical records in the CNDDDB (CNDDDB 2025). The site lacks suitable foraging and breeding habitat for most of these species, as it does not contain marshes, vernal pools, or other essential aquatic habitats required for many of the species (CNDDDB 2025). Western burrowing owl (*Athene cunicularia*, SCE) are known to occur in the project vicinity. However these records are in grassland areas, near the Hayward shoreline, and many appear to be likely extirpated (CNDDDB 2025). This species is not expected to occur on or adjacent to the project site, due to lack of suitable habitat, including a lack of herbaceous ground cover and foraging habitat as well as absence of burrows or burrow surrogates.

Existing mature trees on and near the project site provide potential nesting habitat and food sources for bird species, including raptors (birds of prey) and other migratory birds, protected by the Migratory Bird Treaty Act (MBTA) and Sections 3503 and 3503.5 of the California Fish and Game Code. Cooper's hawk (*Accipiter cooperii*, CDFW WL) is special-status raptor that potentially occurs in the project area based on the presence of mature trees. However, it is unlikely to nest on site due to ongoing human activity and lack of suitable tree cover. This species may forage in the project area if adequate prey is available. Other special-status raptors are not expected to nest on site based on lack of specific habitat requirements. Golden eagle (*Aquila chrysaetos*, FP) typically nest in rugged, remote areas with elevated and secure sites. While golden eagle have been documented foraging at the Eden Landing Ecological Reserve and the Hayward Regional Shoreline, in open marshlands and adjacent grasslands, these sightings are relatively uncommon and there is no suitable foraging habitat on the project site (eBird 2025). In addition, although white tailed kite (*Elanus leucurus*, FP) are known to occur in the project vicinity, this species is not likely to nest or forage on site due to ongoing human activity and the lack of adjacent open fields, marshes, or grasslands for hunting.

Two special-status species, pallid bat (*Antrozous pallidus*, SSC) and western mastiff bat (*Eumops perotis californicus*, SSC) are known to occur in the project vicinity based on historical records in CNDDDB. In addition, Townsend's big-eared bat (*Corynorhinus*

townsendii, SSC) are known to occur in the regional area. However, trees on the project site are isolated from suitable foraging habitat and located in a disturbed, industrial setting and do not provide suitable roosting habitat for these species.

Landscape Trees

Mature trees and other ornamental landscaping are present throughout the property, including the parking and outdoor areas of the existing buildings. A certified arborist conducted a survey and provided an inventory report of the trees on the project site (DayZenLLC 2023d). There are 50 existing trees onsite, 47 of which are considered protected trees per the City's Tree Preservation Ordinance (DayZenLLC 2023a). Protected trees documented on site include 23 blue gum, 8 evergreen pear, 5 raywood ash, 4 coast redwood, 6 Powhatan crape myrtle, and 1 Bradford pear. Two Powhatan crape myrtle are not considered protected due to their size, under a 4 inch diameter trunk size. In addition, a single purple-leaf plum is not considered protected. All 50 trees and other ornamental vegetation would be removed as part of construction.

Regulatory Background

Federal

Endangered Species Act (16 U.S.C., § 1530 et seq., and 50 C.F.R., part 17.1 et seq.). The Endangered Species Act (ESA) designates and provides for protection of threatened and endangered plant and animal species, and their critical habitat. Its purpose is to protect and recover imperiled species and the ecosystems for which they depend. It is administered by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS is responsible for terrestrial and freshwater organisms while NMFS is responsible for marine wildlife such as whales and anadromous fish (such as salmon). Species may be listed as endangered or threatened. All species of plants and animals, except pest insects, are eligible for listing. Species are defined to include subspecies, varieties, and for vertebrates, distinct population segments. The ESA protects endangered and threatened species and their habitats by prohibiting the "take" of listed animals and the interstate or international trade in listed plants and animals, including their parts and products, except under federal permit. Take of federally listed species as defined in the ESA is prohibited without incidental take authorization, which may be obtained through Section 7 consultation (between federal agencies) or a Section 10 Habitat Conservation Plan. The administering agencies are the USFWS, National Oceanic Atmospheric Administration (NOAA), and NMFS.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c). This Act—enforced through regulations written by the USFWS—prohibits the "taking" of bald and golden eagles, including their parts, nests, or eggs. To take is defined as to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb" any bald or golden eagle, whether "alive or dead...unless authorized by permit". The administering agency is USFWS.

Migratory Bird Treaty Act (16 U.S.C., §§ 703-711). The Migratory Bird Treaty Act (MBTA) makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid federal permit. The USFWS has authority and responsibility for enforcing the MBTA. The administering agency is USFWS.

Clean Water Act Sections 401 and 404 (33 U.S.C., §§ 1251–1376). The Clean Water Act (CWA) (33 U.S.C., §§ 1251–1376) requires the permitting and monitoring of all discharges to surface water bodies. Section 404 (33 U.S.C., § 1344) requires a permit from the United States Army Corps of Engineers (USACE) for a discharge from dredged or fill materials into a water of the United States, including wetlands. Section 401 (33 U.S.C., § 1341) requires a permit from the regional water quality control board for the discharge of pollutants. By federal law, every applicant for a federal permit or license for an activity that may result in a discharge into a California water body, including wetlands, must request state certification that the proposed activity will not violate state and federal water quality standards. The administering agency is the U.S. Army Corps of Engineers (Section 404) and the State or Regional Water Quality Control Board (Section 401).

State

California Endangered Species Act (Fish and G. Code, §§ 2050-2098). The California Endangered Species Act (CESA) of 1984 states that all native species of fish, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected and preserved. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. The CDFW may authorize the take of any such species if certain conditions are met. These criteria are listed in Title 14 of the California Code of Regulations, section 783.4 subdivisions (a) and (b). For purposes of CESA “take” means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill these species (Fish and G. Code, § 86). The administering agency is CDFW.

Fully Protected Species (Fish and G. Code, §§ 3511, 4700, 5050, and 5515). These sections designate certain species as fully protected and prohibit the take of such species or their habitat unless for scientific purposes (see also Cal. Code Regs., tit. 14, §670.7). The incidental take of fully protected species may also be authorized in an approved natural community conservation plan (Fish and Game Code, § 2835). The administering agency is CDFW.

California Fish and Game Code, Subsections 3503, 3503.5, 3513, and 3800

The following sections of the Fish and Game Code designate protections for birds and/or their nests or eggs. The administering agency is CDFW.

Section 3503. This section makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

Section 3503.5: This section makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes and Strigiformes or to take, possess, or destroy the nest or eggs of any such bird.

Section 3513: This section protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame birds.

Section 3800: All birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds are nongame birds. It is unlawful to take any nongame bird except as provided in this code or in accordance with regulations of the commission or, when relating to mining operations, a mitigation plan approved by the department.

Lake and Streambed Alteration Agreement (Fish and G. Code, §§ 1600 et seq.). Regulates activities that may divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank or any river, stream, or lake; use materials from any river, stream or lake; or deposit or dispose of material into any river, stream, or lake. "Any river, stream, or lake" includes those that are dry for periods of time as well as those that flow year-round. The administering agency is CDFW.

Native Plant Protection (Fish and Game Code, § 1900 et seq.). The Native Plant Protection Act was enacted in 1977 and designates state rare and endangered plants and provides specific protection measures for identified populations. Those laws prohibit the take of endangered or rare native plants but include some exceptions for agricultural and nursery operations; for emergencies; after properly notifying CDFW, for vegetation removal, from canals, roads, and other sites; due to changes in land use; and in certain other situations. The administering agency is CDFW.

Porter-Cologne Water Quality Control Act. The State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over all surface water and groundwater in California, including wetlands, headwaters, and riparian areas. The SWRCB or applicable RWQCB must issue waste discharge requirements for any activity that discharges waste that could affect the quality of waters of the state.

Local

Hayward 2040 General Plan. The Hayward 2040 General Plan (General Plan), adopted July 1, 2014, outlines goals and policies specific to the city of Hayward, including measures to protect and preserve the city's natural habitat and wildlife. These are described in the Natural Resource Section – Goal NR-1 Biological Resources, Health and Quality of Life Section – Goal HQL-8 Urban Forest and Public Facilities and Services

– Goal PFS-3 Water Distribution (Hayward 2014). The administering agency is the Planning Division of the City of Hayward (City). General Plan goals and policies applicable to the proposed project are as follows:

- **Goal NR-1:** Protect, enhance, and restore sensitive biological resources, native habitat, and vegetation communities that support wildlife species so they can be sustained and remain viable.
- **NR-1.1:** The City shall limit or avoid new development that encroaches into important native wildlife habitats; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.
- **NR-1.2:** The City shall protect sensitive biological resources, including State and Federally designated sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats from urban development and incompatible land uses.
- **NR-1.3:** The City shall require qualified biologists to identify, map, and make recommendations for avoiding all sensitive biological resources on the project site, including State and Federally sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats using methods and protocols in accordance with the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and California Native Plant Society for all development applications proposed within sensitive biological resource areas.
- **NR-1.6:** The City shall support the efforts of the Hayward Area Shoreline Planning Agency and other agencies to preserve and protect tidal flats and salt ponds with low salinity for migratory waterfowl that depend on these areas.
- **NR-1.7:** The City shall encourage protection of mature, native tree species to the maximum extent practicable, to support the local eco-system, provide shade, create windbreaks, and enhance the aesthetics of new and existing development.
- **NR-1.9:** The City shall protect and promote native plant species in natural areas as well as in public landscaping.
- **Goal HQL-8:** Maintain, enhance, and increase the city's urban forest as an environmental, economic, and aesthetic resource to improve Hayward residents' quality of life.
- **HQL-8.1:** The City shall manage and enhance the urban forest by planting new trees, ensuring that new developments have sufficient right-of-way width for tree plantings, managing and caring for all publicly owned trees, and working to retain healthy trees.
- **HQL-8.3:** The City shall require the retention of trees of significance (such as heritage trees) by promoting stewardship and ensuring that project design provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or suitable mitigation.

- **HQL-8.4:** The City shall promote planting shade trees with substantial canopies, and require, where feasible, site design that uses appropriate tree species to shade parking lots, streets, and other facilities to reduce heat island effects.

Hayward Municipal Code. Hayward Municipal Code regulates landscaping, tree preservation, and water-efficient practices to ensure sustainable development and CEQA compliance. The administering agency is the Planning Division of the City of Hayward. The following regulations are applicable to the project:

- Industrial district and parking lot landscaping (Articles 1 and 2 of Chapter 10, sections 10-1.1606.N and 10-2.650): Mandates tree planting along street frontages, landscaped yards, and buffers, with strict maintenance and irrigation requirements.
- Bay-Friendly Water Efficient Landscaping Ordinance (City Code, sections 10-12.01 – 10-12.19): requires the following:
- Water Efficient Landscape Worksheet (Article 12 of Chapter 10, section 10-12.06) to establish water use limits,
- Irrigation Design Plan (Article 12 of Chapter 10, section 10-12.08) to prevent runoff, and
- Landscape Design Plan (Article 12 of Chapter 10, section 10-12.07) prioritizing drought-resistant plants, soil management, and mulch application. Turf is restricted, and invasive or fire-prone species are prohibited.

Tree Preservation Ordinance (Municipal Code, sections 10-15.10 through 10-15.31): This ordinance protects certain trees based on species and size (Municipal Code, section 10-15.13), requiring property owners to maintain them in a healthy state (Municipal Code, section 10-15.14). Tree removal (Municipal Code, section 10-15.20) requires a permit, with mandatory replacement or compensation. Specifically, the Hayward Tree Preservation Ordinance (Municipal Code, Sections 10-15.10 through 10-15.31), mandates that a permit is required for the removal, relocation, cutting, or reshaping of any protected tree. Protected trees are defined to include all required trees on developed properties, memorial or specimen trees, replacement trees from prior development projects, trees with a diameter of eight inches or more measured at 54 inches above the ground, and certain native species with a diameter of four inches or more.

5.4.2 Environmental Impacts

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

Construction

Less Than Significant with Mitigation Incorporated. The project site is developed and does not contain natural community vegetation alliances as described in A Manual of California Vegetation (Sawyer et al., 2009) or listed on the CDFW California Natural Community List (CDFW 2022).

Plants

A literature review of the project site and adjoining area, including a nine-quadrant search of the CNDDDB, IPaC, and CNPS, determined there are 45 special-status plant species that occur regionally within the greater Hayward area surrounding the project site (CNDDDB 2025a, CNDDDB 2025b, USFWS 2025a, CNPS 2025). However, all of the special-status plant species that occur regionally are considered absent and not likely to occur within the site due to a lack of suitable habitat. Based on the location, existing habitat, and conditions (developed, paved, landscaped, etc.) of the site, the implementation of the project would not have direct or indirect impacts to special status plants in the development footprint. Potential impacts from the operation of the facility, including a discussion of nitrogen deposition, are described below.

Wildlife

A literature review of the project site and adjoining area, including a nine-quadrant search of the CNDDDB, IPaC, as well as eBird and iNaturalist, determined there are 49 special-status wildlife species that occur regionally within the greater Hayward area surrounding the project site (CNDDDB 2025a, CNDDDB 2025b, USFWS 2025a). However, the project site is in an urban setting and does not provide habitat for most wildlife species. Most rare, threatened, endangered, and sensitive wildlife species are not expected to occur due to a lack of suitable habitat, including specialized habitat requirements such as wetlands, marshes, estuaries, riparian areas, grasslands, and chaparral (CNDDDB 2025). In addition, although bat species are known to occur in the project vicinity, the blue gum and other trees found on site, do not provide adequate roosting cover. Therefore, impacts to special-status bats are not likely to occur. No special-status wildlife species were identified in the area during reconnaissance surveys (DayZenLLC 2023d). No federally, state listed, or candidate species are expected to occur on or adjacent to the project site.

Special-status species likely to be impacted from development of the project would include nesting birds, including species covered by the MBTA and Fish and Game Code, which could occur as transients or periodic breeders. Mature trees could provide potential foraging or nesting habitat for Cooper's hawk. Although, nesting activity may be limited due to lack of dense forests or nearby streams. Other special-status raptors are not likely to occur based on lack of specific habitat requirements, such as cliffs or large trees for nesting. The project area has the potential to support nesting for common native or migratory bird species which are tolerant of disturbance. Removal of the existing buildings and trees could result in direct impacts to nesting birds and raptors if tree removal occurs during the nesting season (generally defined as February

15 to August 15). Other project activities, including demolition and construction could also result in disturbance of nesting birds near the project site that could result in nest abandonment by the adults and mortality of chicks and eggs. Destruction of active bird nests, nest abandonment, and/or loss of reproductive effort caused by disturbance are considered "take" by the CDFW and would be considered a significant impact.

Impacts to birds nesting in the project area could occur during construction from increased levels of noise from heavy equipment and increased human presence. To avoid and minimize impacts, staff identified mitigation measure **BIO-1**, which requires all construction and operation personnel and project staff to undergo environmental awareness training prior to conducting work on the project. This would ensure construction personnel would avoid identified nesting areas, follow best management practices, and take appropriate measures to prevent disturbances.

In addition, the applicant proposed a measure to reduce potential impacts to nesting birds. The measures included conducting a pre-construction survey no more than 7 days prior to construction during the early part of the breeding season (February through August). Staff evaluated this measure and determined that minor revisions were necessary to reduce potential impacts to nesting birds. Delineation of appropriate buffers to protect the species, at the discretion of the qualified biologist, was added for clarity. Staff proposes mitigation measure **BIO-2**, which requires project demolition and construction activities, including tree removal, to be scheduled outside the nesting period, when possible, and to conduct nesting bird surveys prior to initiation of any of these activities during the nesting period. If active nests are detected, buffers shall be established to avoid disturbance of nesting birds. In addition, a survey report that would include recommended buffer zones would be submitted to the City's Director of Development Services prior to issuance of grading and/or building permits from the City.

Mitigation measures **BIO-1** and **BIO-2** would avoid or reduce impacts to nesting birds to less than significant.

Operation

Less Than Significant. Direct impacts from operation and maintenance activities, which includes noise and lighting from operation of the data center, human presence, and site maintenance such as landscape, irrigation, and building maintenance, are expected to result in the same level of human presence and disturbance as current activities on the property. These are not expected to have a significant impact on biological resources.

PG&E would construct one of three design options for a "looped" (2-way) 115 kV transmission line, single-circuit each way looped into and out of the new PG&E Switchyard, from the existing transmission line adjacent to the project on the northeast corner (DayZen 2024b). Option 1 would include a 300-foot long above-ground line with two new tubular steel poles (TSPs) (80 feet and 70 feet tall) and one or two 35-foot-tall take-down structures near the switchyard. Option 2 would be a longer 1,800-foot

above-ground line with four to five TSPs (70 to 120 feet tall), running along Eden Landing Road, Production Avenue, and Investment Boulevard, with one or two 35-foot-tall take-down structures near the switchyard. Option 3, similar to Option 1, would be a 300-foot long above-ground line with two new TSPs (70 to 120 feet tall), running east along Eden Landing Road and connecting to one or two 35-foot-tall take-down structures near the switchyard (DayZen 2024b).

Bird collisions typically occur when transmission lines intersect flight paths at low altitudes, especially in poor lighting, strong winds, or near wetlands and valleys (Brown 1993; APLIC 1994). The project site is not immediately adjacent to wetland habitat, known flight paths, or geographic features that increase collision risk. In addition, bird electrocution risk is highest for lines energized between 1 kV and 60 kV, while 115 kV lines typically provide sufficient phase-to-phase and phase-to-ground clearance to prevent electrocutions (APLIC 2006). Based on these factors, avian collision and electrocution impacts are not likely to occur. Therefore, there would be a less than significant impact.

Operational impacts that could potentially affect biological resources are indirect impacts resulting from project-related nitrogen deposition on nitrogen-sensitive habitats.

Nitrogen Emission and Deposition Impacts. Operation of the project's 28 emergency backup diesel generators would result in emissions of oxides of nitrogen (NO_x). The project would include 26 2.75-megawatt (MW) generators plus a 1-MW generator for Building A and a 0.175-MW generator for Building B.

Nitrogen deposition is the input of NO_x and ammonia (NH₃) "atmospherically derived pollutants", primarily nitric acid (HNO₃), from the atmosphere to the biosphere. The primary sources of these pollutants are vehicle and industrial emissions, including power generation. Increased nitrogen deposition in nitrogen-poor habitat allows the proliferation of non-native species, which crowds out native species (Fenn et al. 2003; Weiss 2006). Nitrogen fertilization has the potential to exacerbate threats to sensitive species habitat, and the deposition of additional nitrogen in an already stressed ecosystem would be a potentially significant indirect impact.

For siting projects, staff evaluates nitrogen deposition impacts by considering protected areas within a 6-mile radius of a project site. These protected areas include CDFW sensitive natural communities and USFWS designated critical habitat. CEC staff has found that by the time the plume from a conventional power plant has traveled this distance, in-plume concentrations become indistinguishable from background concentrations. In addition, for a data center, the plume(s) often touches down immediately adjacent to the site since the stacks are low, depending on the terrain and other factors. Further, staff considered habitat modification to protected areas and designated critical habitat to be a potentially significant effect if these communities were known to be sensitive to nitrogen deposition. In previous Northern California power plant cases licensed by the Energy Commission (e.g., CEC 2007) as well as a California-wide study of nitrogen deposition (Weiss 2006), 5 kg/ha/yr was used as a

benchmark for analyzing nitrogen deposition impacts to plant communities. There is designated or proposed critical habitat for three federally listed species within 6 miles of the project area. This includes USFWS-designated critical habitat for the western snowy plover, California red-legged frog (*Rana draytonii*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*).

Northern Coastal Salt Marsh Habitat. For this project, staff evaluated protected areas which include USFWS-designated critical habitat for the western snowy plover (Eden Landing, Subunits CA 13A, CA 13B, and CA 13C) located west of the project site, at both the Eden Landing Ecological Preserve and the Hayward Regional Shoreline. These locations provide breeding habitat for western snowy plover which includes salt ponds and foraging habitat in mudflats (USFWS 2005). In addition, northern coastal salt marsh habitat is also present within the Eden Landing Ecological Preserve. Northern coastal salt marsh is considered a sensitive natural community by CDFW and included in the CNDDDB (CNDDDB 2025a).

Northern coastal salt marsh habitat occurs along the margins of the San Francisco Bay in areas that are sheltered from excessive wave action (Mayer, K.E. and W.F. Laudenslayer, Jr. 1988). Northern coastal salt marsh is also considered a sensitive natural community by CDFW and included in the CNDDDB (CNDDDB 2025a). Several special-status species are known to occur in this area of northern coastal salt marsh habitat, California Ridgway's rail (*Rallus obsoletus*; FE, SE, FP), salt marsh wandering shrew (*Sorex vagrans halicoetes*; SSC), and salt marsh harvest mouse (*Reithrodontomys raviventris*; FE, SE) (CNDDDB 2025a).

One approach for quantifying nitrogen deposition is through critical load, which is defined as the input of a pollutant below which no detrimental ecological effects occur over the long-term. Salt marsh habitat tends to have a higher critical load than other ecosystems due to its open nutrient cycles that are less affected by atmospheric deposition than other nitrogen loading sources (Pardo et al. 2011, pg. 3071). Critical load for early successional salt marsh has been estimated to be in the range of 30-40 kilograms nitrogen per hectare per year (kg N/ha/yr) (Bobbink et. al. 2010, pg. 21-22), and 50-100 kg N/ha/yr for intertidal wetlands and 63-400 kg N/ha/yr for intertidal salt marshes (Pardo et. al. 2011, pg. 3059). The CEC staff applied the conservative estimate of 30-40 kg N/ha/yr as the critical load for northern coastal salt marsh.

Critical loads for nitrogen deposition in coastal mudflats and salt ponds is not well-documented, however estimates for other coastal ecosystems suggest a range of 50 to 400 kg N/ha/yr for coastal wetlands and a similar range for northern coastal salt marsh. Therefore, given the ecological similarities staff applied the conservative estimate of 30-40 kg N/ha/yr for western snowy plover critical habitat. Impacts could potentially occur if the emissions from the project in conjunction with baseline nitrogen deposition levels exceed the critical load for the community. In addition, if the baseline for the community is already above the critical load, any additional nitrogen deposition could result in a potentially significant impact.

For a baseline nitrogen deposition estimate, the CEC staff used the Community Multiscale Air Quality (CMAQ) modeling system, which provides estimates of ozone, particulates, toxics, and acid deposition. Staff considered the most recent CMAQ-predicted value of 3.73 kg N/ha/yr at northern coastal salt marsh habitat as the best available data to determine baseline nitrogen deposition (CMAQ 2019). Potential nitrogen deposition impacts from readiness testing and maintenance of the emergency standby generators within a 6-mile radius of the project site were evaluated based on modeling provided by the applicant and reviewed by staff (DayZen 2023i). The CEC staff used the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) (U.S. EPA 2023) to establish nitrogen deposition values for these projects.

Based on conservative modeling using AERMOD, the project's estimated contributions to existing nitrogen deposition would be between 0.001 and 0.02 kg N/ha/yr at the protected habitats near the project site. The project's estimated contribution (between 0.001 and 0.02 kg N/ha/yr) when added to the baseline nitrogen deposition value (3.73 kg N/ha/yr) at northern coastal salt marsh would be substantially below the critical load (30-40 kg N/ha/yr) for these habitat types. Operation of the project would not result in a substantial adverse effect from nitrogen deposition, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status. Therefore, this impact would be less than significant.

California Red-Legged Frog and Alameda Whipsnake Critical Habitat. There is critical habitat for two federally listed species located approximately 4.75 miles east of the project site. This includes Critical Habitat Subunits ALA-1A and ALA-1B for California red-legged frog and Critical Habitat Unit 2 for Alameda whipsnake. These areas are characterized by annual grasslands, coastal scrub, and chaparral. For the California red-legged frog, these habitats provide essential breeding and non-breeding environments, including aquatic systems like ponds and slow-moving streams, as well as adjacent upland areas necessary for foraging and shelter (USFWS 2010). The Alameda whipsnake relies on a mosaic of scrub/shrub communities with both open and closed canopies, often interspersed with grasslands and chaparral and these habitats offer crucial shelter, breeding grounds, and foraging opportunities (USFWS 2006). For these habitats, staff considers the 5 kg/ha/yr benchmark for analyzing nitrogen deposition impacts appropriate as grassland and chaparral communities are known to be sensitive to nitrogen deposition. As stated previously, elevated nitrogen deposition can promote the invasion of non-native grasses, leading to significant alterations in species composition and ecosystem function.

For the baseline nitrogen deposition estimate, staff used the most recent CMAQ-predicted value of 4.73 kg N/ha/yr, which is below the critical load threshold of 5 kg N/ha/yr for these habitats (CMAQ 2019). Based on conservative modeling using AERMOD, the project's estimated contributions to existing nitrogen deposition would be between 0.004 and 0.015 kg N/ha/yr at these protected habitats. The project's estimated contribution (between 0.004 and 0.015 kg N/ha/yr) when added to the

baseline nitrogen deposition value (4.73 kg N/ha/yr) would remain significantly below the critical load (5 kg N/ha/yr) for these habitat types. Operation of the project would not result in a substantial adverse effect from nitrogen deposition, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status. Therefore, this impact would be less than significant.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction

No Impact. The project site is fully developed and immediately surrounded by other commercial and industrial development. There are no riparian habitats or other sensitive natural communities identified in local or regional plans, policies, and regulations or by CDFW or USFWS within the project site. However, the Hayward Regional Shoreline is located approximately 0.5 miles west of the project.

To prevent impacts on natural waterways and riparian habitats, the project would comply with the City's Stormwater Management and Urban Runoff Control Ordinance (Article 11.5 of the Hayward Municipal Code) and the Municipal Regional Stormwater National Pollution Discharge Elimination System (NPDES) Permit (MRP), issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB) to regulate stormwater discharges from municipalities and local agencies (DayZenLLC 2023a). Compliance with these regulations includes implementing a Storm Water Pollution Prevention Plan (SWPPP) and best management practices such as directing runoff into bioswales and replacing portions of the existing paved parking area with pervious pavement. Refer to the "Hydrology and Water Quality" section for additional information. With implementation of the above listed permit and programs, the project would not result in direct or indirect impacts to riparian habitat or any other sensitive natural community.

Operation

Less Than Significant Impact. No direct impacts would occur to riparian habitat or other identified sensitive natural community during operation of the project because none exist at the project site. The implementation of the MRP (Section 4.10 Hydrology and Water Quality) requires the implementation of Low Impact Development (LID)-based storm water treatment controls to manage post-construction runoff, maintaining or restoring the site's natural hydrologic functions. These controls maximize infiltration and evapotranspiration while utilizing storm water as a resource. Additionally, proper installation, operation, and maintenance of storm water treatment measures would be required. Stormwater impacts from operation of the project would be less than those anticipated during construction.

As described above in CEQA environmental criterion “a” for project operation, staff also evaluated the potential for indirect impacts to occur to sensitive vegetation communities located in adjacent areas from nitrogen deposition. As stated above, salt marsh habitat and critical habitat for western snowy plover has a high tolerance for nitrogen input because of its open nutrient cycle (Pardo et. al. 2011, pg 3071) and thus higher critical load in the conservative range of 30-40 kg N/ha/yr. The most current background nitrogen deposition at the northern coastal salt marsh for 2019 is estimated to be 3.73 kg N/ha/yr (CMAQ 2019). Since the nitrogen deposition attributed to the project combined with the background nitrogen would be considerably less than the lowermost critical load of 30-40 kg N/ha/yr for salt marsh, impacts from nitrogen deposition would be less than significant for this sensitive natural community.

c. Would the project 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?

Construction

Less Than Significant. The project site does not support any state or federally protected wetlands, vernal pools, or other jurisdictional features. Therefore, there would be no direct impacts.

The project site is within the Mount Eden Creek Watershed and Mount Eden Creek is located approximately 0.5 miles southwest. The project site is also located 0.5 miles west of freshwater emergent wetlands, freshwater ponds, and estuarine/marine wetlands within the Eden Landing Ecological Preserve (USFWS 2025c). Indirect impacts from the project potentially include stormwater and pollutant runoff, sedimentation, and changes in hydrology during ground disturbing construction activities, including grading and trenching. No work would take place within or adjacent to Mount Eden Creek.

As discussed above under CEQA environmental criterion “b”, the project would be required to adhere to the MRP requirements and implement construction sediment and erosion control measures as described in the applicant’s project design measure, PD HYD-1.1 to avoid soil erosion and avoid a significant loss of topsoil. Prior to any ground-disturbing construction activity, the applicant would comply with the Construction General Permit, which includes the preparation of a construction SWPPP.

As discussed in **Section 5.10 Hydrology and Water Quality**, redevelopment of the site would not cause substantial degradation in the quality, or an increase in the rate or volume of stormwater runoff from the site during construction. See the “Hydrology and Water Quality” section for further discussion. Therefore, with implementation of these project design measures, included in PD HYD-1.1, indirect impacts would be less than significant.

Operation

Less Than Significant Impact. As part of compliance with the MRP, the project would implement LID-based stormwater treatment controls to treat post-construction stormwater runoff, which would include bioretention areas, flow-through planters, and subsurface infiltration systems. The project would include construction of approximately 18,000 square feet of bioretention areas with the goal of restoring the site's natural hydrologic functions. The project would utilize existing sewer lines by connecting drainage pipes to those owned by the City of Hayward and wastewater would be treated by the City of Hayward Water Pollution Control Facility. With the implementation of permit regulations, direct and indirect impacts would be less than significant.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Construction and Operation

No Impact. The project would have no impact on established wildlife corridors, as none exist in the immediate vicinity. Wildlife in the area has already adapted to urbanization, and the site does not support significant wildlife movement. The nearest area where wildlife migration may occur is approximately 4 miles south along Alameda Creek. There are no known wildlife nursery sites, such as a rookery, fawning area, or fish spawning habitat, on or near the project site (U.S. EPA 2025; USFWS 2025a; USFWS 2025b). Therefore, the project would not impede wildlife movement corridors or disrupt use of wildlife nursery sites during construction or operation.

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

Construction

Less Than Significant. There are no native habitats or vegetation communities that support wildlife species on site. Land cover in the project area is classified as developed/ornamental (DayZenLLC 2023c). All vegetation on the project site consists of ornamental landscaping, including trees, shrubs, and perennial herbs.

Due to the lack of vegetation communities and native habitat, the project would not conflict with any conservation land use goals or policies protecting natural habitats, as included in the Hayward 2040 General Plan. However, the General Plan provides for protection for trees along with the City's Tree Preservation Ordinance (Municipal Code, §§ 10-15.10 through 10-15.31). Conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or tree replacement policies would be a significant impact.

The arborist report, included as Appendix C of the SPPE application, identified 50 trees which would all be removed as part of the project (DayZenLLC 2023d). Forty-seven of these trees are protected under the City's Municipal Code, section 10-15.13, and require replacement per the Tree Preservation Ordinance. The Tree Preservation Ordinance defines protected trees as those with a trunk diameter of at least 8 inches (measured at 54" above ground) and prohibits removal without a permit. Tree replacement must be of like-size, like-kind trees or an equal value, subject to approval by the City's Landscape Architect, and whenever possible, replacement trees should be planted on the same site, City's Municipal Code, section 10-15.20. Any replacement trees would not count toward the minimum landscaping requirements specified in the zoning code and property owners must fulfill zoning landscaping mandates independently of any obligations to replace protected trees that have been removed.

The applicant acknowledges the need for a tree removal permit and proposed planting 47 trees and would pay in-lieu fees for the remaining trees, pending approval of a Landscape Design Plan during review of the Improvement Plans. This plan must comply with the Water Efficient Landscape Ordinance and may incorporate recommendations from the Certified Arborist Report and City's Arborist Notes.

Therefore, since the applicant would adhere to tree removal permit conditions and municipal code requirements, project construction would not conflict with local policies or ordinances protecting biological resources and impacts would be less than significant.

Operation

Less Than Significant. Tree removal or other activities that conflict with any local policies or ordinances protecting biological resources are not proposed to occur during operation of the project. If tree removal were necessary during the operation, the project owner would be required to comply with local policies and ordinances and apply for a tree removal permit. A tree removal/pruning permit would be required for the removal or pruning of protected trees, as defined in the City's Municipal Code, sections 10-15.13 and 10-15.20. Therefore, impacts would be less than significant.

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

Construction and Operation

No Impact. There are no approved habitat conservation plans (HCPs), natural community conservation plans, or other adopted plans that would apply to the proposed project. Therefore, there would be no impact during construction or operation of the proposed project.

5.4.3 Mitigation Measures

BIO-1: Worker Environmental Awareness Program

A qualified biologist shall be retained by the project owner/developer to conduct a Worker Environmental Awareness Program (WEAP) training focused on nesting bird protection for all construction personnel prior to the commencement of any ground-disturbing activities during the nesting season. The training shall include a description of nesting bird species that may be encountered, regulatory protections under the Migratory Bird Treaty Act and California Fish and Game Code and other state and federal laws protecting birds, survey and buffer requirements during the nesting season, and proper protocols for reporting and avoiding impacts to active nests.

BIO-2: Nesting Bird Avoidance and Minimization Measures

Project construction shall be conducted outside of the nesting bird season to the extent feasible (September 1 to January 31). If construction activities commence outside this period, from February 1 through August 31, or if tree removal and pruning occurs outside this period then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities or initiation of tree removal and pruning.

During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and up 500 feet from the impact areas for nests. If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, the ornithologist shall establish a species-specific work exclusion zone around each nest that shall be followed by the contractor. If an active nest is found within a distance that could result in disturbance, the ornithologist shall establish a construction-free buffer zone—typically 300 feet for raptors and 100 feet for other bird species—to prevent nest disturbance.

Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors; an exclusion zone radius (typically 300 feet for raptors and 100 feet for other species). The exclusion zone size may be reduced from established levels if supported with nest monitoring by a qualified ornithologist indicating that work activities outside the reduced radius would not impact the nest.

The project buffer shall be monitored periodically by the project ornithologist to verify compliance. After nesting is complete and all young have fledged, as determined by the ornithologist, the buffer would no longer be required, and tree removal may occur. If an

active bird nest is discovered during demolition or construction, then a buffer zone shall be established under the guidelines specified above.

A report detailing the survey findings and any required buffer zones shall be submitted to the Director of Development Services prior to tree removal and the issuance of a grading or demolition permit. The report shall contain maps showing the location of all nests, species nesting, status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and the buffer size around each nest (including reasoning behind any alterations to the initial buffer size). The report shall be provided within 10 days of completing a pre-construction nest survey.

5.4.4 References

- APLIC 1994 – Avian Power Line Interaction Committee, Mitigating Bird Collisions with Power Lines: the State of the Art in 1994, Edison Electric Institute, Washington, DC.
- APLIC 2006 – Avian Power Line Interaction Committee (APLIC). Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission, Washington, D.C. and Sacramento, CA. Accessed December 2024. Accessed at: <https://www.nrc.gov/docs/ML1224/ML12243A391.pdf>
- Brown 1993. Brown, W. M. 1993. Avian collisions with utility structures: Biological perspectives. In: Proceedings: Avian Interactions with Utility Structures. International Workshop, Miami, FL. Sponsored by APLIC and EPRI.
- Bobbink, R., et al. 2010 – Bobbink, R., K. Hicks, J Galloway, T. Spranger, R. Alkemade, M. Ashmore, M. Bustamante, S. Cinderby, E. Davidson, F. Dentener, B. Emmett, J.W. Erisman, M. Fenn, F. Gilliam, A. Nordin, L. Pardo, and W. De Vries (Bobbink R. et. al). January 2010. Global assessment of nitrogen deposition effects on terrestrial plant diversity: a synthesis. Ecological Applications 20:30-59. Accessed online at: <https://eprints.whiterose.ac.uk/10814/1/0Bobbinketal2010.pdf>
- Calflora 2024 – Calflora. Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals [web application]. 2024. Berkeley, California. Accessed June 28, 2024. Accessed online at: <https://www.calflora.org/>
- CDFW 2024 – California Department of Fish and Wildlife (CDFW). Eden Landing Ecological Reserve. Accessed July 2024. Accessed online at: <https://wildlife.ca.gov/Lands/Places-to-Visit/Eden-Landing-ER#10541120-history>
- CDFW 2025a – California Department of Fish and Wildlife (CDFW). California Wildlife Habitat Relationships System. Accessed February 15, 2025. Accessed online at: <https://map.dfg.ca.gov/imaps/cwhr/cwhrlife.html>
- CDFW 2025b – California Department of Fish and Wildlife (CDFW), California Natural Community List, Dated July 5, 2022. Accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>

- CEC 2006 – California Energy Commission (CEC). Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity. Prepared by the University of California, Santa Barbara and Creekside Center for Earth Observation. Public Interest Energy Research Program Publication. CEC-500-2005-165
- CEC 2007 – California Energy Commission (CEC). Final Staff Assessment, City of Hayward Eastshore Energy Center (06-AFC-6). November.
- CMAQ 2019 – Community Multiscale Air Quality Modeling System (CMAQ). Download shapefiles of CMAQ-predicted values of annual total deposition across the US for 2002 through 2019. Accessed: February 2025, Accessed online at: http://www.epa.gov/cmaq/cmaqoutput#CMAS_Data_Warehouse
- CNDDDB 2024 – California Natural Diversity Database (CNDDDB). BIOS and Rarefind 5 (Government Version) 9 quad search around the proposed project. Last Accessed June 28, 2024
- CNDDDB 2025 – California Natural Diversity Database (CNDDDB). CNDDDB: BIOS 6 (Com) /Spotted Owl Viewer, 9 quad search around the proposed project. Accessed: February 2025.
- CNPS 2024 – California Native Plant Society (CNPS), Rare Plant Program – Inventory of Rare and Endangered Plants of California (online edition, v8-03 0 39). Accessed June 28, 2024. Accessed at <http://www.rareplants.cnps.org>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023c – DayZenLLC. (TN 252251). STACK SVY03A – SPPE Application – Appendices A and B, Part III of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023d – DayZenLLC. (TN 252252). STACK SVY03A – SPPE Application – Appendices C - E, Part IV of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023i – DayZenLLC (TN 254420). STACK SVY03A–STACK Supplemental Data Responses Set 1 Attachment PD DR-19, dated February 12, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024a – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024b – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

- eBird 2005 – eBird: An Online Database of Bird Distribution and Abundance. Cornell Lab of Ornithology. Accessed February 2025. Accessed at <https://ebird.org>.
- Fenn et al. 2003 – Fenn, M.E., Baron, J.S., Allen, E.B., Rueth, H.M., Nydick, K.R., Geiser, L., Bowman, W.D., Sickman, J.O., Meixner, T., Johnson, D.W., P. Neitlich (Fenn et al.). 2003. Ecological effects of nitrogen deposition in the western United States. *Bioscience* 53(4): 404-420
- Gogol-Prokurat, M. 2014 – Essential Connectivity Areas – California Essential Habitat Connectivity [ds620]. Calif. Dept. of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Accessed January 2024. Accessed online at <http://bios.dfg.ca.gov>
- HARD 2024 – Hayward Area Recreation and Park District. Accessed July 2024. Accessed online at: <https://www.haywardrec.org/1991/Nature-Centers>
- Hayward 2014 – City of Hayward (Hayward). City of Hayward 2040 General Plan. July 1, 2014. Accessed July 2024. Accessed online at: <https://www.hayward2040generalplan.com/>
- iNaturalist 2025 – iNaturalist: A Community for Naturalists and Citizen Scientists. California Academy of Sciences & National Geographic Society. Accessed February 2025. Accessed online at: <https://www.inaturalist.org>
- Mayer&Laudenslayer, Jr. 1988 – Mayer, K.E. and W.F. Laudenslayer, Jr (Mayer&Laudenslayer, Jr). 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp.
- Pardo L.H. et. al, 2011 – M.E. Fenn, C.L. Goodale, L.H. Geiser, C.T. Driscoll, E.B. Allen, J. Baron, R. Bobbink, W.D. Bowman, C. Clark, B. Emmett, F.S. Gilliam, T. Greaver, S.J. Hall, E.A. Lilleskov, L. Liu, J. Lunch, K Nadelhoffer, S.S. Perakis, M.J. Robin-Abbott, J. Stoddard, K. Weathers, and R.L. Dennis (Pardo L.H. et. al). December 2011. Effects of nitrogen deposition and empirical nitrogen critical loads for ecoregions of the United States. *Ecological Applications* 21:3049-3082
- Sawyer et al., 2009 – John Sawyer, Todd Keeler-Wolf, and Julie Evens (Sawyer et al.). A Manual of California Vegetation: Second Edition, 2009
- Spencer et al. 2010 – Spencer, W.D., P. Beier, K. Penrod, K. Winters, C Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. Accessed at: <https://consbio.org/reports/california-essential-habitat-connectivity-project-a-strategy-for-conservation-a-connected-california/>
- U.S. EPA 2023 – U.S. Environmental Protection Agency (U.S. EPA). Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System. Federal Register, 23 Oct. 2023,

- <https://www.federalregister.gov/documents/2023/10/23/2023-22876/guideline-on-air-quality-models-enhancements-to-the-aermod-dispersion-modeling-system>
- U.S. EPA 2024 – U.S. Environmental Protection Agency (U.S. EPA). San Francisco Bay Delta, About the Watershed, updated April 18, 2024. Accessed on July 1, 2024. Accessed online at: <https://www.epa.gov/sfbay-delta/about-watershed#sfb>
- U.S. EPA 2025 – United States Environmental Protection Agency (U.S. EPA). EnviroMapper. Accessed: February 2025. Accessed online: <https://enviro.epa.gov/enviro/em4ef.home>
- USFWS 2005 – U.S. Fish and Wildlife Service (USFWS). 2005. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*). Federal Register 70(188): 56970–57119.
- USFWS 2006 – U.S. Fish and Wildlife Service (USFWS). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Alameda Whipsnake (*Masticophis lateralis euryxanthus*). Federal Register 71(190): 58176–58231.
- USFWS 2010 – U.S. Fish and Wildlife Service (USFWS). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for California Red-Legged Frog (*Rana draytonii*). Federal Register 75(51): 12816–12959.
- USFWS 2025a – United States Fish and Wildlife Service (USFWS). Critical Habitat Mapper. Accessed February 2025. Accessed online at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>
- USFWS 2025b – U.S. Fish and Wildlife Service (USFWS). Information for Planning and Consultation (IPaC). Accessed February 2025. Accessed online at: <https://ipac.ecosphere.fws.gov/>
- USFWS 2025c – U.S. Fish and Wildlife Service (USFWS). National Wetlands Inventory: Surface Waters and Wetlands. Accessed February 2025. Accessed online at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- Weiss 2006 – Weiss, S. B. Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity. California Energy Commission, PIER Energy-Related Environmental Research. CEC-500-2005-165

5.5 Cultural and Tribal Cultural Resources

This section describes the environmental setting and regulatory background and discusses the impacts associated with the construction and operation of the proposed project with respect to cultural and tribal cultural resources.

CULTURAL RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TRIBAL CULTURAL RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
d. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.5.1 Environmental Setting

The section considers four broad classes of cultural resources: Native American archaeological, ethnographic, historic-period, and tribal cultural resources. The next four paragraphs briefly describe these classes of resources. Afterward, this section presents the environmental setting pertinent to these resources:

- *Native American archaeological, ethnographic, and historic contexts* - generally describes who lived in the project vicinity, the timing of their occupation, and what uses they made of the area
- *Methods of analysis* - establishes what kinds of physical traces (cultural and tribal cultural resources) past peoples might have left in the project area, given the project vicinity's Native American archaeological, ethnographic, and historic contexts
- *Results* ensuing from those methods - identifies the specific resources present or expectable in the project area
- *Regulatory setting* - presents the criteria for identifying *significant* cultural and tribal cultural resources under the California Environmental Quality Act (CEQA) and other applicable authorities, as well as criteria for identifying significant impacts on these resources

Native American archaeological resources are those materials relating to Native American occupation and use of a particular environment. These resources may include sites and deposits, structures, artifacts, rock art, trails, and other traces of Native American activity. In California, the Native American archaeology dates to more than 12,000 years ago and extended through the eighteenth century until A.D. 1769, when Europeans first colonized California.

Ethnographic resources are those materials important to the heritage of a particular ethnic or cultural group, such as Native Americans or African, European, or Asian immigrants. They may include traditional resource collecting areas, ceremonial sites, topographic features, value-imbedded landscapes, cemeteries, shrines, or neighborhoods and structures. Ethnographic resources are variations of natural resources and standard cultural resource types. They are subsistence and ceremonial locales and sites, structures, objects, and rural and urban landscapes assigned cultural significance by traditional users. The decision to call resources "ethnographic" depends on whether associated peoples perceive them as traditionally meaningful to their identity as a group and the survival of their lifeways.

Historic-period resources are those materials, archaeological and architectural, usually but not necessarily associated with Euro-American exploration and colonization of an area and the beginning of a written historical record. They may include archaeological deposits, sites, structures, trail and road corridors, artifacts, or other evidence of historic human activity. Under federal and state requirements, historic period cultural resources must be 50 years or older to be considered of potential historic importance. A resource less than 50 years of age may be historically significant if the resource is of exceptional importance. The Office of Historic Preservation (OHP 1995, page 2) endorses recording and evaluating resources 45 years or older to accommodate a five-year lag in the planning process.

Tribal cultural resources are a category of historical resources introduced into CEQA by Assembly Bill 52 (Stats. 2014). Tribal cultural resources are resources that are any of

the following: sites, features, places, cultural landscapes, sacred places, or objects that are included in or determined eligible to the California Register of Historical Resources (CRHR) or are included on a local register of historical resources as defined in Public Resources Code, section 5020.1(k). Tribal cultural resources can be Native American archaeological, ethnographic, or historic.

California Native American Archaeological Context

Based on previous research in Central California, the Bay region can be divided into two major periods: the Archaic Period, which includes the Lower, Middle, and Upper Archaic, and the Emergent Period. We skip the discussion of Clovis early occupation during the 11,500 to 8000 calibrated years before current era (cal. BCE) because evidence of that period has not yet been discovered in the Bay area, presumably due to archaeological sites eroding away by stream action, becoming buried by recent alluvium, or being submerged by rising sea levels. (Milliken et al. 2007, page 114.)

The archaeological record in the Bay Area began with the Lower Archaic Period between 8000 to 3500 cal. BCE characterized by millingslab and handstones and a wide range of stemmed and leaf shaped projectile points. In the hills east of Mount Diablo, the earliest Bay Area date for a milling stone component is 7920 cal. BCE, obtained through radiocarbon dating charcoal found beneath an overturned millingslab. At this same site, archaeobotanical remains suggest an emphasis on gathering acorns and wild cucumbers. (Milliken et al. 2007, page 114).

The Middle Archaic Period ranged from 3500 to 500 cal. BCE and exhibits developments in groundstone technology (i.e., replacing millingslabs with the mortar and pestle), less movement of entire communities, regional symbolic integration between cultural groups, and increased trade (Milliken et al. 2007, pages 114–115). This cultural pattern lasted until cal. 500 BCE., when the Lower Middle Period began with a “major disruption in symbolic integration systems.” (Milliken et al. 2007, page 115). Archaeological assemblages from the Lower Middle Period include more olive snail-shell saucer beads and circular abalone shell ornaments (and the disappearance of the rectangular shell beads), as well as bone tools and whistles (Milliken et al. 2007, page 115).

The Upper Middle Period began about 1520 before present (B.P., or 1950) with a disruption of the olive snail-shell bead trade network, abandonment of some village sites, and changes in shell bead manufacture. Some South Bay burials from this period were extended rather than flexed, and grave goods were lacking. (Milliken et al. 2007, page 116).

The Emergent Period, also known as the Late Period, began about 900 B.P., with groups increasing intensifying the creation of wealth objects, as seen in burials. Smaller projectile points for use in the bow and arrow emerged during this period and some of the mortuary evidence suggests the introduction of cremation, at least among the wealthiest of individuals. (Milliken et al. 2007, page 117).

Buried archaeological resources are a real possibility in the Bay Area. The melting of the ice sheets during the late Pleistocene Epoch caused the sea level to rise rapidly, submerging much of the western shoreline in this resource-rich area. Sea level rise along with the combined runoff from the Sacramento and San Joaquin rivers deeply buried much of the later archaeological resources in the region. (Meyer et al. 2014, pages 7–9).

Ethnographic Context

The Costanoans, also known as Ohlone, are the Native Americans who inhabited the Bay Area since time immemorial. The Costanoan designation refers to those who spoke one of eight separate but related languages (Shipley 1978, pages 84, 89). The Costanoan languages are related to Miwok and are part of the Yok-Utian language family of the Penutian stock (Golla 2007, pages 75–76). Chochenyo was spoken around the southeastern area of San Francisco Bay and the lower Santa Clara Valley (and was spoken by Costanoans in the project vicinity). (Milliken et al. 2007, Figure 8.1; Shipley 1978, page 84).

Being coastal peoples, mussels were an important food to the Costanoans as well as sea mammals and fish (Kroeber 1976, page 467). Like most other Native Americans in California, acorns were the staple plant food of the Costanoan people in the San Francisco Bay area. The Costanoans set controlled fires to promote the growth of the nuts and seeds upon which they relied. The primary terrestrial mammals taken by the Costanoan included the black-tailed deer, elk, antelope, grizzly bear, and mountain lion. (Kroeber 1976, page 467; Levy 1978, page 491).

Thatched, domed houses were the most common type of structure for the Costanoans. Sweathouses along the banks of rivers were also constructed, in addition to dance enclosures and assembly houses. The tule raft was the only boat known to the Costanoans and was often used to cross the San Francisco Bay. (Kroeber 1976, page 468; Levy 1978, page 492).

The Chochenyo usually cremated the deceased on the day of death, although burials occurred when no relatives were available to gather firewood for a funeral pyre. The community either buried the deceased's property with the body or destroyed their property. (Kroeber 1976, page 469; Levy 1978, pages 490–491).

Trade was important for the Costanoan groups, and their primary partners in trade were probably the Plains Miwok, Sierra Miwok, and Yokuts (Levy 1978, page 488). The Costanoan provided coastal resources such as mussels, abalone shell, dried abalone, and salt to the Yokuts in exchange for piñon pine nuts. The Miwok obtained olive snail shells from the Costanoans. Warfare occurred between Costanoan tribelets as well as the Costanoans and the Esselen, Salinan, and Northern Valley Yokuts. (Davis 1961, page 19; Levy 1978, page 488).

A common archaeological manifestation of a Costanoan village site is the shell mound deposit (Kroeber 1976, page 466). Mussels are the primary shells that constitute these mounds, in addition to other household wastes.

The Spanish established seven missions in Costanoan territory between 1770 and 1797. By 1810, the mission system subsumed the last Costanoan village. Missions in the Bay Area mixed various language and cultural groups including the Northern Valley Yokuts, Plains Miwok, Lake Miwok, Coast Miwok, and Patwin. By water, the mission closest to the proposed project area was San Francisco de Asís, built in 1776. Mission San José was closest to the Chochenyo village of Lisjan by land. (Levy 1978, page 486, Figure 1).

Historic Context

To inform understanding of the potential significance of built environment resources in the project vicinity, a review of the major historical timeline markers for the project area provides context. This subsection offers a brief look at those events and trends in the history of the San Francisco Bay area that provide that context for the project site:

- Spanish Mission Period
- Mexican Period
- American Period
 - Pioneering Settlers
 - Community Growth and Development
 - Agribusiness
 - Commercial Development
 - Project Site History

Spanish/Mission Period (1769 to 1822)

The Spanish Period was characterized by several developments: the establishment of Spanish Colonial military outposts (presidios), pueblos, and 21 missions throughout Alta California. Nearest to the location of the proposed project were the San Francisco de Asís Mission (1776) and San José Mission (1797), although Mission Santa Clara de Asís was closest to the project vicinity between 1777 and 1797 (Castillo 1978, Figure 1). Mission lands were generally used for the growing of wheat, flax, peas, corn, and beans along with livestock grazing. (Goldman et al. 2024, page 20).

Mexican Period (1822 to 1848)

Following Mexican independence from Spain in 1822, Mexican Governor Pío Pico granted lands to Mexican settlers—including the former lands of the missions, whose connection to the government was lost in the Decree of Secularization in 1834. Mexico began making land grants to Hispanic families and prominent citizens as part of the hacienda or rancho system. As a result, large estates of farm and ranch lands were held

by a concentration of upper-class families. In 1842, Rancho Arroyo de la Alameda, totaling 17,705 acres, was granted by Governor Alvarado to José de Jesús Vallejo, who was an administrator at Mission San José and military commander. The project area is within the former boundaries of the Rancho Arroyo de la Alameda land grant. (Goldman et al. 2024, page 21).

American Period (1848 to Present)

California became the thirty-first state in the union in 1850. Hayward's location as a stage stop between Oakland and San José, as well as the development of the short-lived local rail line between Alameda and Hayward in 1865, spurred early growth near the project area in Hayward. Though the local rail line did not last long and the area experienced severe structural damage during the earthquake of 1868, the location continued to attract settlement. By 1870, Hayward's population reached 1,000 and incorporation followed in 1876. (Goldman et al. 2024, page 21).

Pioneering Settlers

The first settlers of Hayward were hunters and farmers who saw a lot of potential in the Bay Area's nutrient rich soil and wildlife. Initial development of this area was a two-step process. First, was the establishment of a landing, or port. Then the pioneers farmed the land to provide products to the ships from their port. Not long after, others followed suit and a specialized occupation developed. Farmers grew a variety of crops while shippers further developed the ports to handle the increasing amount of goods and people coming to the area. Further east, development of a different sort occurred. Here, William Hayward and other early businessmen catered to overland travelers, providing provisions, lodgings, and services such as stage connections. (Goldman et al. 2024, page 22).

Community Growth and Development

Hayward's initial growth was a slow, steady trend, largely due to farmers looking to claim their own piece of the fertile lands. The result was the establishment of several communities, each one having its own school system, commercial centers, and church. Each community eventually merged becoming the city of Hayward. The City of Hayward incorporated in 1876 which allowed the city to establish police and fire departments, a high school, and lead the growth of many regional organizations such as libraries, banks, and trade groups. (Goldman et al. 2024, pages 22–23).

Agribusiness

For nearly 100 years, agriculture was at the heart of the region's economy. Hayward geography made the coastal areas the closest shipping point for much of the Livermore and Amador valleys. When the railroads began to dominate the transport of goods, Hayward's location increased the importance as regional rail hub, spurring the planting of orchards. Truck farming became a focal point of the local and regional economy. (Goldman et al. 2024, page 23).

This growth continued in the beginning of the twentieth century as Hayward became a food processing and commercial center. Settlers were drawn to the numerous industries located along rail routes, which resulted in growth of the school system, fire department, and construction of City Hall. Hayward also excelled at livestock and poultry husbandry, as well as livestock processing. A wide variety of animals, from dairy cows to pigeons, were raised for meat and pelts throughout the Hayward area. (Goldman et al. 2024, page 23).

Commercial Development

Most commercial growth in Hayward was focused on serving its citizens. Banks, blacksmiths, grocers, retail stores, and theaters were formed to support and promote life in a small town. As shipping technology improved, refrigeration plants, cold storage, warehousing companies, trucking firms, and industrial manufacturing took root along the Southern Pacific Railroad (SPRR) tracks at the western edge of town. As these industries waned in the 1970s, they were replaced by office parks that served the growing regional technology and commercial economy. (Goldman et al. 2024, pages 23–24).

Project Area History

The project footprint (including all linears, construction laydown areas, and access routes) is located within the city of Hayward, Alameda County, California. The main project site is bounded by Production Avenue to the east, Investment Boulevard to the south, commercial buildings to the west, and Eden Landing Road to the north.

Eden Landing was a salt-producing center for almost 100 years. The San Francisco Bay is a premium salt harvesting area. There is evidence of local Native Americans harvesting salt. The Spanish missions would harvest salt from exposed rocks and branches, harvesting enough salt to use both in the mission cooking, but also to export. (Goldman et al. 2024, pages 24–25).

The American Period provides the first example of changing the landscape to induce more salt production when, in 1853, John Johnson added levees to his 14-acre homestead to create artificial salt ponds. His home was north of Highway 92 and the project area. His first harvest was 25 tons, which was shipped to San Francisco via steamboat in the Bay. California salt was considered a cruder product, and was cheaper, than imported European salt. More sales and regular business improved research and development into upgrading the production and refining methods in the 1860s. Additionally, sales of marshland were incentivized. By 1870, California transferred more than 790,000 acres of swampland to fewer than 200 people after legislation allowed swampland purchases on credit. This created the conditions for the commercialization and consolidation of salt production companies. Large companies (primarily Dumbarton Land and Improvement Company and Leslie Salt Company) bought out smaller companies to increase their operation efficiencies, resulting in lower

maintenance and shipping costs, which freed up resources to improve commercial packaging. (Goldman et al. 2024, page 25).

Much of the land associated with the salt enterprises was sold off in the 1960s and 1970s for light industrial and office parks, which were seen as the future of Hayward-area businesses. By 1966, the parcels that form Eden Landing had been acquired by the Eden Landing Corporation, a division of the Western Reneline Corporation, known for real estate developments. (Goldman et al. 2024, page 26).

Eden Landing, the home of the current project, was designed to be a garden-type industrial center with a focus on attractive buildings and landscaping, described as “historic and rustic” and touted for being a beautified industrial place, almost like a suburban landscape. The architect of record was James Palmer of Andersen and Palmer, and the landscape architect was Lawrence Halprin of San Francisco. Since its opening in 1967, Eden Landing has continued to serve Hayward as an industrial park. (Goldman et al. 2024, pages 28–29).

Project Linears

The project linears (electrical supply, potable water, fire water, fiber, and sanitary sewer) are generally accessible from the City’s infrastructure located along Eden Landing Road, Production Avenue, and Investment Boulevard, all along the perimeter of the project site. Specifically for electrical supply, PG&E would construct a “looped” transmission interconnection involving two offsite transmission line extensions. This would involve a line on the south side of the project that comprises two circuits of 115 kV overhead transmission line (T-Line) from an existing PG&E Eastshore to Grant 115 kV Line which is located on the south side of the project site. (DayZen LLC 2023, pages 32 and 38).

Methods of Analysis

The methods employed for the cultural resources analysis include determining a Project Area of Analysis (PAA), reviewing records and other documents provided by a literature search and other historical sources as needed; consultation with California Native American tribes; and historic architectural and archaeological surveys.

Project Area of Analysis

The PAA defines the geographic area in which the proposed project has the potential to affect cultural or tribal cultural resources. Effects may be immediate, further removed in time, or cumulative. They may be physical, visual, audible, or olfactory in character. The PAA may or may not be one uninterrupted expanse. It could include the site of the proposed project (project site), and the routes of requisite transmission lines. The PAA has archaeological, ethnographic, and historic built environment components, as described in the following paragraphs.

Staff defines the archaeological component of the PAA as all areas where the applicant proposes ground disturbance to construct and operate the proposed project. This includes the proposed building sites, demolition, parking, landscaping, areas to be graded, staging and laydown areas, tree removal, access roads, perimeter fence, electrical substation and switching station, subsurface drainage, sanitary sewer line, fire water line and potable water line. The application describes estimated excavation depths for the proposed project elements:

- Proposed data center building sites, 3 feet for matt slabs, 20 feet below ground surface for aggregate piers. (DayZen LLC 2023, page 40).
- Drainage facilities up to 7 feet below existing grade (DayZen LLC 2023, page 40).

For ethnographic resources, the PAA considers sacred sites, tribal cultural resources, traditional cultural properties (places), and larger areas such as ethnographic landscapes that can be vast and encompassing, including view sheds that contribute to the historical significance of such resources. The Native American Heritage Commission (NAHC) assists project-specific cultural resources consultants and agency staff in identifying these resources, and consultation with Native Americans and other ethnic or community groups may contribute to defining the PAA. In the case of the proposed project, the immediate environs consist largely of an existing, built, industrial park. Staff therefore treats the ethnographic component of the PAA as the same as the archaeological component.

The historic built environment PAA for this project includes buildings and structures within a one-building/parcel-band surrounding the project site. The built environment PAA is part of a fully built-up urban environment mostly consisting of paved roads and industrial park buildings.

Literature Review

The literature review for this analysis consisted of a records search at the California Historical Resources Information System (CHRIS), review of the application for small power plant exemption, and examination of pertinent literature concerning cultural resources in the Alameda County and Bay Area.

On behalf of the applicant, Chronicle requested a records search on June 14, 2023, at the Northwest Information Center (NWIC) of the CHRIS. The NWIC is the State of California's official repository of cultural resource records, previous cultural resources studies, and historical information concerning cultural resources for 16 counties, including Alameda County. The records search area included the project site and a 1-mile buffer. In addition to the NWIC's maps of known cultural resources and previous cultural resources studies, the records search included a review of the National Register of Historic Places (NRHP), a review of the CRHR, California's Points of Historical Interest and Historical Landmark's directories, local inventories, historic maps and OHP's Directory of Properties in the Historic Property Data File. (Goldman et al. 2024, pages 29–30).

In addition, staff also consulted the NRHP, CRHR, and other repositories of documentation of historical resources, including internal CEC files.

Tribal Consultation

Applicant's Correspondence

Chronicle, on behalf of the applicant, contacted the NAHC on June 13, 2023, to request a search of the Sacred Lands File and a list of tribes that might be interested in the proposed project. The NAHC responded on July 3, 2023, and provided a list of eight California Native American tribes to contact:

1. Amah Mutsun Tribal Band of Mission San Juan Bautista
2. Confederated Villages of Lisjan Nation
3. Costanoan Rumsen Carmel Tribe
4. Indian Canyon Mutsun Band of Costanoan
5. Muwekma Ohlone Indian Tribe of the SF Bay Area
6. North Valley Yokuts Tribe
7. The Ohlone Indian Tribe
8. Wuksachi Indian Tribe/Eshom Valley Band

Chronicle sent letters to these tribes on July 20, 2023, and placed follow-up phone calls on July 24, 2023. (Goldman et al. 2024, page 69 and Appendix B).

CEC Consultation

CEQA requires lead agencies to consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of a project, and that have previously requested consultation. To invoke an agency's requirement to consult under CEQA, a tribe must first send the lead agency a written request for formal notification of any projects within the geographic area with which they are traditionally and culturally affiliated. (Pub. Resources Code, § 21080.3.1(b)). The CEC has received one request for formal notification from a tribe that has traditional and cultural affiliation with the geographic area of the proposed project, the Wuksachi Indian Tribe/Eshom Valley Band.

Additionally, consistent with the CEC's tribal consultation policy (see CEC 2024), CEC staff contacted the NAHC on September 1, 2023, to request a search of the Sacred Lands File and a list of California Native American tribes that might be interested in the proposed project. The NAHC responded on October 20, 2023, and provided a list of eight California Native American tribes to contact, including the Wuksachi Indian Tribe/Eshom Valley Band; the listed tribes were the same eight tribes with whom the applicant corresponded. CEC staff mailed initial consultation letters to these eight tribes

on March 29, 2024. See the following subsection, “Results,” for tribal responses and lead agency follow-up.

Archaeological Survey

On July 17, 2023, an archaeologist surveyed the project site, which corresponds to the staff-defined archaeological PAA (Goldman et al. 2024, page 70).

Intensive-level and reconnaissance pedestrian survey methods were employed due to the primarily paved project area; any unpaved areas were surveyed in transects no greater than 15 feet apart. The archaeological survey also involved examination of locations that archival research indicated may be archaeologically sensitive for historic-era materials; for example, locations where structures are depicted on historical topographic maps, or infrastructure and other evidence of development apparent in historical aerial images. Digital photographs were taken to document the current conditions of the project site and include general views of the project area and topography, vegetation density, and other relevant images. (Goldman et al. 2024, page 69).

Historic Architectural Survey

The historic architectural survey was conducted by staff of Chronicle on July 17–18, 2023, inclusive of the project area (project site and extending one-parcel from the proposed project boundaries). Any building or structure constructed before 1974 or potentially eligible for the CRHR or local register was evaluated on Department of Parks and Recreation 523 series forms (Goldman et al. 2024, page 70).

Results

Literature Review

The NWIC records search indicates that 38 previous cultural resources studies occurred within 1 mile of the project site, none of which cover the project site. (Goldman et al. 2024, page 30 and Appendix A). The NWIC has one record of a previously recorded cultural resource on the project site (a historic transmission line), and documents 17 previously recorded cultural resources within the 1-mile records search buffer (**Table 5.5-1**). Thirteen of the previously recorded cultural resources are archaeological sites, whereas four of the resources are historic built environment resources. (Goldman et al. 2024, pages 35–37 and Table 4-1). Additionally, **Table 5.5-2** identifies the built environment resources that fall within the historic built environment PAA.

TABLE 5.5-1 PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN ONE MILE OF THE PROJECT SITE

No.	Primary Number	Resource Description	Age
1.	P-01-000201	Lithic and habitation debris	Native American
2.	P-01-000202	Habitation debris and salt mining	Native American/historic
3.	P-01-000203	Domestic refuse	Historic

TABLE 5.5-1 PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN ONE MILE OF THE PROJECT SITE

No.	Primary Number	Resource Description	Age
4.	P-01-000204	Dispersed refuse	Historic
5.	P-01-000206	Dispersed refuse	Historic
6.	P-01-000207	Refuse scatter	Historic
7.	P-01-000209	Refuse scatter	Historic
8.	P-01-000210	Oliver Salt Works	Historic
9.	P-01-000216	Foundations a building rubble	Historic
10.	P-01-000217	Area of landings and warehouses	Historic
11.	P-01-001783	SPRR	Historic
12.	P-01-001791	Hull of a ship	Historic
13.	P-01-002256	Refuse scatter	Historic
14.	P-01-002269	PG&E T-line	Historic
15.	P-01-003312	Herman Mohr House	Historic
16.	P-01-011437	Historic district	Historic
17.	P-01-011804	PG&E T-line	Historic

Note: SPRR = Southern Pacific Railroad

TABLE 5.5-2 BUILT ENVIRONMENT RESOURCES 45 YEARS OR OLDER WITHIN THE PAA OF THE PROJECT SITE (PROJECT AREA OF ANALYSIS-ONE PARCEL BOUNDARY)

No.	Address or Primary #	APN	Year Built	Description
1.	26010 Eden Landing Road	461-0085-052-01	1971	Multi-tenant office park: Eden Landing Business Park, Suite 1B
2.	26203 Production Avenue	461-0085-001-08	1973	Multi-tenant office park: Eden Landing Business Park, Suite #9-2
3.	3521 Investment Boulevard	461-0085-016-00	1977	Multi-tenant office park: Eden Plaza Business Park
4.	25972 Eden Landing Road	461-0001-037-03	1971	Commercial: Gillig Corporation Headquarters
5.	3486 Investment Boulevard	461-0001-026-00	1968	Industrial light/manufacturing: Core & Main, Rodan Builders
6.	3524 Investment Boulevard	461-0085-046-00	1975	Industrial light/warehouse: Global Quality Foods, Inc.
7.	3474 Investment Boulevard	461-0001-027-00	1969	Industrial/warehouse
8.	3400 Investment Boulevard	461-0001-028-00	1969	Industrial/warehouse
9.	3392-3396 Investment Boulevard	461-0001-029-01	1971	Industrial/warehouse
10.	P-01-002269	N/A	1922	Eastshore-Grant Transmission Line (Update)
11.	Roads of Eden Landing	No Parcel	1968	Paved roads

Note: APN = assessor's parcel number

Tribal Consultation

Applicant's Correspondence

The applicant's June 13, 2023, search of the Sacred Lands File returned positive results, indicating the presence of Native American cultural resources in the search area. Chronicle sent tribal outreach letters to the NAHC-identified contacts on July 20, 2023.

Chronicle did not receive any responses. (Goldman et al. 2024, page 69 and Appendix B).

CEC Consultation

The NAHC's September 21, 2023, search of the Sacred Lands File returned positive results, indicating the presence of Native American cultural resources in the search area. Staff sent out letters with a brief description of the proposed project and invited consultation to the eight California Native American tribes listed by the NAHC on March 29, 2024. One tribe, the Confederated Villages of Lisjan Nation, requested copies of the cultural record search, draft environmental document, NAHC response letter, and any archaeological reports prepared for the proposed project. The requested documentation was provided to them on April 16, 2024. CEC staff held a virtual consultation meeting with the Confederated Villages of Lisjan Nation on May 29, 2024, and subsequently updated the mitigation measures in the draft environmental section as requested. The Confederated Villages of Lisjan Nation reviewed the revised Initial Study section and updated mitigation measures and agreed to the revisions. Consultation was concluded by email on June 13, 2024. No consultation requests from other California Native American tribes were received within or after the 30-day response period.

Archaeological Surveys

The archaeological surveys did not identify archaeological or ethnographic resources in the surveyed area (DayZen LLC 2023, page 117; Goldman et al. 2024, page 70).

Historic Architectural Survey

As identified in Table 5.5-2 above, 11 built environment resources were identified within the historic built environment PAA requiring recordation and evaluation. These resources included industrial and commercial buildings/warehouses, the previously recorded Eastshore-Grant Transmission Line (P-01-000269), and the paved road system of Eden Landing. Chronicle evaluated the 11 built environment resources for their potential as historical resources by applying the criteria for the CRHR and the local register. All 11 resources were recommended not eligible under criteria 1–4 of the CRHR and the criteria of the local register (Goldman et al. 2024, pages 70–88). Therefore, no historic built environment resources meeting the CEQA definition of a historical resource have been identified within the PAA. The following subsections include descriptions and individual CRHR and local evaluations for all 11 recorded built environment resources as presented in Goldman et al. (2024, pages 70–88).

26010 Eden Landing Road

26010 Eden Landing Road, the address of the Eden Landing Business Park, is a 10-building small bay industrial and office area. The business park has approximately 195,044 sq ft total of office space. The business park has minimal landscaping, comprising a central tree and plantings around the perimeter of the property. The buildings are surrounded by parking spaces and connections between buildings. The

buildings are generally rectangular and constructed of a mixture of brick, smooth stucco, and metal. The overall style of the buildings is Commercial Modern: there is minimal ornamentation, bringing the focus to the geometric symmetry and exterior metal structure. Many of the storefronts have curtainwall entrances recessed behind the line of the wall, a hallmark of the style. Additionally, some buildings have a brise-soleil (sun shade) and a clerestory ribbon window for additional light.

The buildings at 26010 Eden Landing Road were constructed in 1971, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

Beginning in the 1960s, suburban expansion, including construction of industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. The Eden Landing Business Park did not make a significant contribution to the local, state, or national suburban expansions of industrial parks.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. Based upon a review of the permit record, former tenants include Bistro 92, West Coast Deli, and Granny Mae Deli. Research in Hayward's Daily Review, newspapers.com, and the internet does not indicate Bistro 92 was a significant business due to lack of press coverage and fanfare. "West Coast Deli" is a common name and research specifically related to this business does not indicate it was a legacy business nor significant in the economic development of Hayward. Additionally, research in Hayward's Daily Review, newspapers.com, and the internet does not indicate Granny Mae Deli was a significant business due to lack of press coverage and fanfare.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Eden Landing is not significant for its physical design or construction. The Eden Landing Business Park is a collection of ten buildings of generally the same design. The buildings are utilitarian with minimal architectural detailing. They do not embody distinctive characteristics of a type, period, or method of construction, and do not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect who

designed the overall Eden Landing Business Park's curving streets and trees, but the landscape design has been substantially altered with a drought-tolerant plant palette and removal of other significant features, such as fruit trees. For these reasons, the subject property, a collection of ten similar buildings, does not meet the eligibility criteria for design or construction as either an individually eligible property or the criteria for designation as a contributor to a historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

26203 Production Avenue

26203 Production Avenue is the southern portion of the Eden Landing Business Park. The two-story building is rectangular in plan. The ground level features a recessed primary façade clad in tile with aluminum storefront doors and windows. The eave projects and is supported by square metal columns. The second floor is set back and is clad in smooth stucco. Small ribbons of aluminum fixed-pane windows are asymmetrically located on this façade. A false awning clad in composition shingles accents the flat roof line. Landscaping is minimal and consists of small shrubs.

The buildings at 26203 Production Avenue were constructed in 1973, according to City records, and they are not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

26203 Production Avenue does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 26203 Production Avenue did not make a significant contribution

to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. No ownership was identified in the permit record, and additional research did not identify owners or tenants.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

26203 Production Avenue is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered with a draught-tolerant plant palette and the removal of other significant features, such as fruit trees. For these reasons, the subject property, a five-building segment of the ten total buildings in the Eden Landing Business Park property, also does not meet the eligibility criteria for as an individual property, nor for designation as a historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3521 Investment Boulevard

3521 Investment Boulevard is within the Eden Plaza, a multi-tenant office and industrial business park of seven similar buildings connected by a parking lot and similar landscaping. The area is landscaped with grass, trees, and hedges. The buildings are constructed of tilt-up concrete construction. The buildings have an exterior outer wall that creates a semi-enclosed walkway. The interior spaces are set back slightly and have multi-paned windows and security doors, which alternate with stretches of white walls. Each stretch of white walls is adorned with triangular wire sculptures.

The buildings at Eden Plaza, 3521 Investment Boulevard were constructed in 1977, according to City records, and they are not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

The Eden Plaza Business Park does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, between 1974 and 1980, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout Northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. The Eden Landing Business Park did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. Based upon a review of the permit record, former tenants include the Selway Machine Tool Company and the Eden Plaza Cafe. Research in Hayward's Daily Review, newspapers.com, and the internet does not indicate Eden Plaza Cafe was a significant business due to lack of press coverage and fanfare. Selway Machine Tool Company's relocation to Eden Plaza was announced in local newspapers as the first tenant of Eden Plaza in 1974, but the company is now based in Union City. It is unclear when Selway Machine Tool moved.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Eden Plaza Business Park is not significant for its physical design or construction. The Eden Plaza Business Park is a collection of seven buildings of generally the same design. The buildings are utilitarian with minimal architectural detailing. They do not embody distinctive characteristics of a type, period, or method of construction, and do not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered with a draught-tolerant plant palette and removal of other significant features, such as fruit trees. For these reasons,

the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property. Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

25872 Eden Landing Road

25972 Eden Landing Road is a large warehouse building with additional office space. The building is made up of a large, tall, windowless warehouse building and a single-story addition is attached to the front. The warehouse building has a large mansard roof with a white masonry base. The mansard roof is clad with batten seam metal roofing. Three single-story buildings are connected to the north façade of the main warehouse. The one on the northeast corner, the office building, matches the larger warehouse; it has a mansard roof over repeating, thin floor-to-ceiling windows and blank spaces. The other offices are two shed-roof buildings. One building has horizontal vinyl siding with a steeply pitched shed roof. The other shed-roofed building is a single-story building with inoperable multi-paned modern windows and channel vertical vinyl siding. Landscaping consists of young trees, shrubs, and grassy lawns.

The building at 25972 Eden Landing Road was constructed in 1971, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

25972 Eden Landing Road does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 25972 Eden Landing Road did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

The subject property is not known for significant associations with persons or companies who made demonstrably significant contributions to history. Based upon review of the building permit record, former tenants were Caterpillar and the Gillig Company. Benjamin Holt built his first combine harvester in Stockton, California in 1886. C.L. Best established the C.L. Best Traction Company in 1910 in San Leandro. That same year, the Holt Manufacturing Company registered "Caterpillar" as a trademark. In 1925, the Holt Manufacturing Company and C.L. Best Tractor Company merged to form the Caterpillar Tractor Company. The Caterpillar executive offices remained at San Leandro until 1930, when they moved to Peoria, Illinois. The location at 25972 Eden Landing Road was used as a parts depot for the Bay Area. The building was one of many parts depots in the 1980s and has greater association with San Leandro than its neighbor Hayward. Caterpillar used the building until at least 2001, when it was hiring positions for warehouse employees. Based in Livermore, California, Gillig is a leading manufacturer of heavy-duty transit buses, and is a family-owned business that was established in 1890.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

25972 Eden Landing Road is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered with a draught-tolerant plant palette and removal of other significant features, such as fruit trees. For these reasons, the subject property no longer conveys its association with the work of Halperin and cannot be considered individually significant or as part of a larger district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3486 Investment Boulevard

3486 Investment Boulevard is a rectangular single-story commercial building with a flat roof. The building has a commercial storefront made up of a hipped eave, clad in vertical wood siding. The ground floor is five bays of large multi-paned windows and two security doors separated by metal piers that support the hipped eave. Each corner is clad in false stone cladding. There are decorative blue bands around the top of the building. There is minimal landscaping, limited to the front, with mature trees, grass, and a side yard. The sides and rears are paved parking areas, parts of which are used to store building materials. The rear façades (east and south façades) have some rolling garage doors for warehouse delivery purposes. The offices are two shed-roof buildings. One building has horizontal vinyl siding with a steeply pitched shed roof. The other shed-roofed building is a single-story building with inoperable multipaned modern windows and channel vertical vinyl siding.

The building at 3486 Investment Boulevard was constructed in 1968, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

3486 Investment Boulevard does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout Northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 3486 Investment Boulevard did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. No ownership was identified in the permit record and additional research did not identify owners or tenants.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic

values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

3486 Investment Boulevard is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with grass lawn. For these reasons, the subject property also does not meet the eligibility criteria as an individually significant property, nor for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3524 Investment Boulevard

3524 Investment Boulevard is a one-story warehouse. The flat roof is clad in composition roll. A band of concrete accents the parapet of the building. The primary façade has full-height aluminum storefront windows accented with cast concrete columns. The columns span the façades of the building, and the secondary façades have pebble veneer between the columns.

The building at 3524 Investment Boulevard was constructed in 1974, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 3524 Investment Boulevard did not make a significant

contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. Based upon a review of the permit record, Next Seafood and Sherwood Medical Industries, Inc. were among the tenants of this property. No information pertaining to Next Seafood was identified in Hayward's Daily Review, newspapers.com, or through a general internet search. Little information pertaining to Sherwood Medical Industries, Inc.'s time in Hayward was identified in Hayward's Daily Review, newspapers.com, or through a general internet search. Sherwood Medical Industries planned the office-warehouse in 1974, but it is unclear when they left.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

3524 Investment Boulevard is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. Although designed in the International style, it does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with a paved surface parking lot, shrubs, and immature trees. For these reasons, the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3474 Investment Boulevard

3474 Investment Boulevard is a large rectangular building. It has five bays of storefronts made up of security doors and large-paned glass curtain walls. The bays are separated by offset columns and capitals that support a large rectangular pediment. On the east and west sides are vertical banded siding with a decorative purple band. A

smaller purple band runs along the top of the building. The building has a flat roof. The windows on the side are thin, multipaned vertical windows. The building has minimal landscaping and a paved parking spaces around the east, west, and south sides.

The building at 3474 Investment Boulevard was constructed in 1969, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

3474 Investment Boulevard does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 3474 Investment Boulevard did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. No ownership was identified in the permit record and additional research did not identify owners or tenants.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

3474 Investment Boulevard is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. Although designed in the International style, it does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with a drought-tolerant landscape and paved surface parking lots. For these reasons, the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3400 Investment Boulevard

3400 Investment Boulevard is a single-story, square masonry building. It features a flat roof and alternating bays of windows and decorative dark wood segments. On each corner of the building, there are doors for the two respective addresses (3400 and 3412). The landscaping is minimal, and the rear façades of the building are surrounded by a paved parking lot. The rear of the building has three rolling garage doors. The building at 3400 Investment Boulevard was constructed in 1969, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

3400 Investment Boulevard does not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 3400 Investment Boulevard did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. Based upon a review of the permit record, Action Laminates is among the tenants of this building. Action Laminates has been manufacturing standard and custom laminate furniture at this location since 2002. Research in Hayward's Daily Review, newspapers.com, and the internet does not indicate Action Laminates is a significant business due to lack of press coverage and fanfare.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

3400 Investment Boulevard is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with grass lawn. For these reasons, the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

3392–3396 Investment Boulevard

3392–3396 Investment Boulevard is a utilitarian, rectangular single-story warehouse building with a flat roof. The walls are stucco over masonry. The street façade features a heavy frieze, which is a hipped eave with a low pitch. The upper frieze is clad in vertical wood panels. The frieze cantilevers over the front façade and is supported by large red brackets, which also serve to separate the façade into different segments. There are six segments: five have windows and one has a set of security doors. The fenestration is clusters of four windows. There are three bays with operable windows and two with fixed windows. The east and west ends of the street façade is clad with rough stone veneer. The other three façades are utilitarian and have little to no ornament. The west façade has three windows and no other entrances. The south, or rear, façade is used for large material storage and has a freight loading dock. The east façade is mostly blank with one loading dock with a rolling garage door.

The building at 3392–3396 Investment Boulevard was constructed in 1971, according to City records, and it is not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

3392–3396 Investment Boulevard does not have a significant association with an event or pattern of events. Hayward’s early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although the subject property was constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. 3392–3396 Investment Boulevard did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward’s salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with the subject property. No ownership was identified in the permit record and additional research did not identify owners or tenants.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

3392–3396 Investment Boulevard is not significant for its physical design or construction. The building is utilitarian with minimal distinctive architectural detailing. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, the subject property is not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with grass lawn and shrubs. For these reasons, the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

P-01-02269 Eastshore-Grant Transmission Line

The transmission line consists of a series of steel lattice towers suspending high-tension electric lines. It is a segment of the line that runs between the Eastshore and Grant substations in Alameda County. The towers are approximately 70 feet tall with bases approximately 15 square feet.

The Transmission Line was previously documented by Cindy Baker in 2001. In her report, Baker outlines the history of the transmission line from its construction in 1922 in rural areas and how it connected to other PG&E lines that were already built at the time. The towers in this segment of the transmission line are the same type as in many other transmission lines at the time.

Significance Evaluation

The transmission line is associated with the rapid residential and industrial development of the East Bay in the early twentieth century. The components of the transmission lines, however, are not unique or individually representative of that development history. The basic lattice engineering and utilitarian design of the towers are reflected in other exterior infrastructure support structures, like radio towers and bridges.

So, the transmission line meets Criterion A/1 for events, which signaled a need for an integrity discussion. In summary, Baker found the integrity of location, workmanship, and design are intact but noted that the setting and feeling has “changed considerably.” When the line was constructed, it ran throughout rural areas, and industrial areas like the solar salt works, and is now surrounded by a modern office park. It did not maintain its integrity of materials, as the original copper wires supported by the towers had likely been replaced. Its integrity of association was also compromised by the normal maintenance and improvement carried out by PG&E over the decades of use.

Therefore, the subject property is not eligible for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

Roads of Eden Landing Business Park

The roads and sidewalks of Eden Landing are uniform width, approximately 42 feet wide. They are blacktop paved with painted lanes. Any sidewalks are set back from the street by approximately 30 feet. However, the sidewalks are not contiguous, and the landscape is dictated by the individual property.

The roads of Eden Landing Business Park were constructed in 1968, according to archival research, and they are not listed on the Hayward Inventory of Historic Resources.

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

The roads of Eden Landing Business Park do not have a significant association with an event or pattern of events. Hayward's early economic development was tied to salt production, which peaked between 1900 and 1930, dwindled, and finally ended in 1977. Although these roads were constructed during the period of salt production, it has no known association with this early industry. Beginning in the 1960s, suburban expansion, including industrial parks, occurred throughout northern California in the postwar period. The Hayward Business Park, on the northerly side of Industrial Boulevard, appears to be of a similar age based upon the style, materials, and methods of construction, and reflects the general trend of the development of industrial parks in this area of Hayward. The roads of Eden Landing Business Park did not make a significant contribution to the local, state, or national suburban expansions of industrial parks, nor to Hayward's salt-production industry.

Criterion 2: Associated with the lives of persons significant in our past.

Persons and companies who made demonstrably significant contributions to history are not known to be associated with these roads. No ownership was identified in the permit record and additional research did not identify owners or tenants.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The roads of Eden Landing Business Park are not significant for its physical design or construction. The road is utilitarian with no architectural detailing or road furniture. It does not embody distinctive characteristics of a type, period, or method of construction, and does not possess high artistic value. Furthermore, these roads are not known to be the work of a master architect. Lawrence Halprin was a master landscape architect, but the landscape design has been substantially altered and replaced with grass lawn and shrubs. For these reasons, the subject property also does not meet the eligibility criteria for designation as a contributor to a potential historic district.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

There is no reason to expect the subject property has the potential to yield important information regarding prehistory or history due to soil disturbance associated with the development of the subject property.

Therefore, the subject property does not meet one or more eligibility criteria for listing in the CRHR or as a City Designated Historical Resource. The subject property is not a historical resource pursuant to CEQA or the City municipal code.

Archaeological Sensitivity

Buried archaeological resources are a real possibility in the Bay Area. The melting of the ice sheets during the late Pleistocene Epoch caused the sea level to rise rapidly, submerging much of the western shoreline in this resource-rich area. Sea level rise along with the combined runoff from the Sacramento and San Joaquin rivers deeply buried much of the later archaeological resources in the region. (Meyer et al. 2014, pages 7–9). The NWIC records search documents seven archaeological monitoring or testing/excavation reports within 1-mile of the PAA (Goldman et al. 2024, Table 4-3). Of these, two reports identified buried archaeological resources at depths ranging from 30 centimeters (~12 inches) to 3 meters (~10 feet) below ground surface. Historically, the PAA has contained buildings and structures, along with agricultural fields and possibly orchards. Additionally, the resource rich Baylands have been heavily used by human for millennia, evidence of which may have been buried through sea level rise and alluvium deposition. Therefore, the potential for buried historic archaeological resources is moderate to high.

Regulatory Background

Federal

No federal regulations related to cultural and cultural resources apply to the project.

State

California Environmental Quality Act. Various laws apply to the evaluation and treatment of cultural resources. CEQA requires lead agencies to evaluate cultural resources by determining whether they meet several sets of specified criteria that make such resources eligible to the CRHR. Those cultural resources eligible to the CRHR are historical resources. The evaluation then influences the analysis of potential impacts to such historical resources and the mitigation that may be required to reduce any such impacts.

CEQA and the CEQA Guidelines define significant cultural resources under two regulatory definitions: historical resources and unique archaeological resources. A historical resource is defined as a “resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources”, or “a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code,” or “any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the agency’s determination is supported by substantial evidence in light of the whole record.” (Cal. Code Regs., tit. 14, § 15064.5[a]). Historical resources that are automatically listed in the CRHR include California historical resources listed in or formally determined eligible for the NRHP and

California Registered Historical Landmarks from No. 770 onward (Pub. Resources Code, § 5024.1(d)).

Under CEQA, a resource is generally considered historically significant if it meets the criteria for listing in the CRHR. In addition to being at least 50 years old, a resource must meet one or more of the following four criteria (Pub. Resources Code, § 5024.1):

- Criterion 1, is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2, is associated with the lives of persons important in our past;
- Criterion 3, embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4, has yielded, or may be likely to yield, information important in prehistory or history.

In addition, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association (Cal. Code Regs., tit. 14, § 4852(c)).

Even if a resource is not listed or determined to be eligible for listing in the CRHR, CEQA requires the lead agency to determine whether the resource is a historical resource as defined in Public Resources Code, sections 5020.1(j) or 5024.1.

In addition to historical resources, archaeological artifacts, objects, or sites can meet CEQA's definition of a unique archaeological resource, even if the resource does not qualify as a historical resource (Cal. Code Regs., tit. 14, § 15064.5(c)(3)).

Archaeological artifacts, objects, or sites are considered unique archaeological resources if it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person (Pub. Resources Code, § 21083.2[g]).

To determine whether a proposed project may have a significant effect on the environment, staff analyzes the project's potential to cause a substantial adverse change in the significance of historical or unique archaeological resources. The magnitude of an impact depends on:

- The affected historical resource(s);

- The specific historic significances of any potentially impacted historical resource(s);
- How the historical resource(s) significance is manifested physically and perceptually;
- Appraisals of those aspects of any historical resource's integrity that figure importantly in the manifestation of the resource's historical significance; and
- How much the impact will change historical resource integrity appraisals.

Title 14, California Code of Regulations, section 15064.5(b) defines a "substantial adverse change" as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

California Native American Tribes, Lead Agency Tribal Consultation Responsibilities, and Tribal Cultural Resources

CEQA provides definitions for California Native American tribes, lead agency responsibilities to consult with California Native American tribes, and tribal cultural resources. A "California Native American tribe" is a "Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004" (Pub. Resources Code, § 21073). Lead agencies implementing CEQA are responsible for consultation with California Native American tribes about tribal cultural resources within specific timeframes, observant of tribal confidentiality, and if tribal cultural resources could be impacted by a CEQA project, are to exhaust the consultation to points of agreement or termination.

Tribal cultural resources are either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR
 - b. Included in a local register of historical resources as defined in the Public Resources Code, section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in the Public Resources Code, section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe. (Pub. Resources Code, § 21074[(a)]).

A cultural landscape that meets the criteria of Public Resources Code, section 21074(a), is a tribal cultural resource to the extent that the landscape is geographically defined in terms of its size and scope (Pub. Resources Code, § 21074(b)). Historical resources, unique archaeological resources, and non-unique archaeological resources, as defined at Public Resources Code, sections 21084.1, 21083.2(g), and 21083.2(h), may also be

tribal cultural resources if they conform to the criteria of Public Resources Code, section 21074(a).

CEQA also states that a project with an impact that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code, § 21084.2).

Local

City of Hayward General Plan. Historical and cultural resources are addressed in policies LU-8.1 thru LU-8.14 in the Land Use and Community Character Element. General Plan Goal LU-8 is to preserve Hayward's historic districts and maintain a unique sense of place and to promote an understanding of the regional and community history. (Hayward 2014).

City of Hayward Municipal Code. The City of Hayward has developed and maintains its own historical preservation program (Chapter 10, Article 11, Historic Preservation, Sections 10.11.010 through 10.11.160). According to the City's Historic Preservation Ordinance (Municipal Code Chapter 10.11), the City of Hayward maintains an inventory of historical resources known as the Adopted Survey List; requires historical preservation permits for additions or alterations to buildings or structures within City Historic Districts; can designate and place resources on the local register; provide conditions of approval for development projects in archaeologically sensitive areas and provides incentives for the preservation of designated historical resources (Hayward 2010).

5.5.2 Environmental Impacts

Cultural Resources CEQA Checklist Questions

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

Construction

Less Than Significant with Mitigation Incorporated. No historic built environment resources meeting CEQA's criteria for historical resources are in the PAA. No archaeological or ethnographic resources meeting CEQA's criteria for historical resources occupy the surface of the PAA. The PAA has been disturbed through the construction of commercial and industrial buildings along with adjacent roads. Nonetheless, previous research and archaeological monitoring in the project vicinity indicate that the PAA could harbor buried archaeological or ethnographic resources. Buried archaeological resources are a real possibility in the Bay Area. The melting of the ice sheets during the late Pleistocene caused the sea level to rise rapidly submerging much of the western shoreline in this resource rich area. Sea level rise along with the

combined runoff from the Sacramento and San Joaquin rivers deeply buried much of the later archaeological resources in the region. (Meyer et al. 2014, pages 7–9).

The ground disturbance required to construct the proposed project, specifically grading, drainage facilities, and the installation of piers, would extend as deep as 20 feet below grade. Shallower excavations would have a much lower potential to encounter buried resources as the PAA is within an already built environment. If unknown buried resources were to be damaged during construction, it would be considered a significant impact, particularly because most of the older archaeological sites are only found in a buried context.

Given the sensitivity of the PAA, mitigation measures requiring worker awareness program and use of qualified archaeologists and Native American monitors (**CUL-1**), subsurface testing focusing on the locations of the structure support piles (**CUL-2**), procedures for the event that Native American or historic resources are encountered during excavation or grading of the site (**CUL-3**), and procedures for the event that human remains are discovered (**CUL-4**) to reduce impacts to buried historical resources have been identified. With implementation of mitigation measures **CUL-1** through **CUL-4**, impacts to buried historical resources would be reduced to a less than significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on historical resources are therefore not anticipated during operation and maintenance.

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

Construction

Less Than Significant with Mitigation Incorporated. See the response to CEQA checklist criterion “a” above, which includes a discussion of historic, archaeological, and ethnographic resources. Implementation of mitigation measures **CUL-1** through **CUL-4** would reduce impacts on buried, unique archaeological resources to a less than significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on unique archaeological resources are therefore not anticipated during operation and maintenance.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Construction

Less Than Significant with Mitigation Incorporated. See the response to CEQA checklist criterion “a” above, which includes a discussion of historic, archaeological, and ethnographic resources (all of which could include human remains). Mitigation measures **CUL-1** through **CUL-4** would reduce impacts on buried human remains to a less than significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. Impacts on human remains are therefore not anticipated during operation and maintenance.

Tribal Cultural Resources CEQA Checklist Questions

- d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?**

Construction

No Impact. There are no tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources in the PAA. Therefore, no project impacts would occur during construction.

Operation

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. No impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources would result. Therefore, no project impact would occur during long-term operation or maintenance.

- e. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to**

be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Construction

Less Than Significant with Mitigation Incorporated. Although there are no known tribal cultural resources on, or directly adjacent to the proposed site, ground disturbance associated with the proposed project could result in the exposure and destruction of buried, as-yet unknown Native American archaeological resources that could qualify as tribal cultural resources. If these resources were to be exposed or destroyed, it would be a significant impact. Implementation of mitigation measures **CUL-1** through **CUL-4** would reduce impacts on buried, tribal cultural resources to a less than significant level.

Operation and Maintenance

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. Impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources are therefore not anticipated during operation and maintenance.

5.5.3 Mitigation Measures

CUL-1: Prior to the commencement of construction, the applicant will secure the services of qualified archaeological specialists and Native American monitors. These specialists and monitors will prepare a workforce environmental awareness program (WEAP) to instruct construction workers of the obligation to protect and preserve valuable archaeological and Native American resources for review and approval by the Director or Director's designee of the City of Hayward Planning Division. This program will be provided to all construction workers via a recorded presentation and will include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the specialists. Submit the qualifications of archaeological specialists and Native American monitors, as well as an electronic copy of the WEAP to the Director or Director's designee of the City of Hayward Planning Division for review and approval.

The applicant will secure the services of Native American and archaeological monitors to observe excavations of the native soils that underlie disturbed and fill dirt at the project site. Preference in selecting Native American monitors shall be given to members of the Confederated Villages of Lisjan Nation with:

- Traditional ties to the area being monitored.

- Knowledge of local Native American village sites.
- Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- Ability to travel to project sites within traditional tribal territory.
- Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5.
- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions.
- Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

If members of the Confederated Villages of Lisjan Nation are unavailable for monitoring, the applicant may retain one or more monitors from another affiliated Ohlone tribe, if the monitor(s) meet the qualifications specified above.

CUL-2: After the existing buildings are demolished but before the issuance of grading permits, the project will be required to complete subsurface testing to determine the extent of possible resources onsite. Subsurface testing will include borehole testing or a combination of borehole testing and shovel test pits, and testing shall focus on the locations of the structural support piles or piers. Subsurface testing shall be completed by a qualified archaeologist and Native American monitors. Based on the findings of the subsurface testing, an archaeological resources treatment plan shall be prepared by a qualified archaeologist in consultation with Native American monitors and submitted to Director or Director's designee of the of the City of Hayward Planning Division for approval prior to the issuance of grading permits, if warranted.

CUL-3: If archaeological resources are encountered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the Director or Director's designee of the City of Hayward Planning Division shall be notified, and a qualified archaeologist will examine the find. The archaeological and Native American monitors will evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building

permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeological and Native American monitors. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the Director or Director's designee of the City of Hayward Planning Division, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center.

The project applicant will ensure that construction personnel do not collect or move any cultural material and will ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.

CUL-4: If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Alameda County Coroner shall be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the Director or Director's designee of the City of Hayward Planning Division, the Northwest Information Center, and the MLD.

5.5.4 References

- Castillo 1978 – Edward D. Castillo (Castillo). The Impact of Euro-American Exploration and Settlement. In *California*, edited by Robert F. Heizer, pp. 99–127. Handbook of North American Indians, vol. 8, William C. Sturtevant, ed. Washington, D.C.: Smithsonian Institution, 1978.
- CEC 2024 – California Energy Commission (CEC). *Tribal Consultation Policy*. CEC-130-2024-001. Sacramento, CA, February 2024.
- DayZen LLC 2023 – DayZen LLC. (TN 252249). STACK SVY03A SPPE Application, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

- Davis 1961 – James T. Davis (Davis). *Trade Routes and Economic Exchange among the Indians of California*. Report No. 54. March 31. Berkeley: University of California Archaeological Survey.
- Goldman et al. 2024 – (TN 255193). Hannah Goldman, Katherine Sinsky, Joseph Howell, Carrie Chasteen, and Maximilian van Rensselaer (Goldman et al.). *Cultural Resources Assessment Report for the Eden Landing Data Center Project, City of Hayward, Alameda County, California*. Confidential report prepared for David J. Powers and Associates, Inc., San José, CA. Prepared by Chronicle, LLC, Walnut Creek, CA. February 9, 2024.
- Golla 2007 – Victor Golla (Golla). Linguistic Prehistory. Chapter 6 in *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 71–82. Lanham, MD: Altamira, 2007.
- Hayward 2010 – City of Hayward (Hayward). City of Hayward Municipal Code. Chapter 10.11 Historic Preservation. Codified through Ordinance No. 10-10, adopted June 15, 2010. Accessed online:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART11HIPROR
- Hayward 2014 – City of Hayward (Hayward). *Hayward 2040 General Plan Policy Document*. Accessed online at: <http://www.hayward-ca.gov/sites/default/files/documents/Hayward-2040-General-Plan-Downloadable.pdf>
- Kroeber 1976 – A. L. Kroeber (Kroeber). *Handbook of the Indians of California*. Reprinted. New York, NY: Dover Publications. Originally published in 1925, Bulletin No. 78, Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.
- Levy 1978 – Richard Levy (Levy). Costanoan. In *California*, edited by Robert F. Heizer, pp. 485–495. Handbook of North American Indians, vol. 8, William C. Sturtevant, ed. Washington, D.C.: Smithsonian Institution, 1978.
- Meyer et al. 2014 – Jack Meyer, Pat Mikkelsen, Julia Costello, Heather Norby, and Meta Bunse. (Meyer et al.). Addendum - Archaeological and Native American Cultural Resources Sensitivity Assessment for the Van Ness Avenue Bus Rapid Transit Project, San Francisco, California. Prepared for the Federal Transit Administration. Prepared by Far Western Anthropological Research Group, 2014.
- Milliken et al. 2007 – Randall Milliken, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson (Milliken et al.). Punctuated Culture Change in the San Francisco Bay Area. Chapter 8 in *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 99–123. Lanham, MD: Altamira, 2007.

OHP 1995 – Office of Historic Preservation (OHP). *Instructions for Recording Historical Resources*. Sacramento, CA: Office of Historic Preservation. March 1995.

Shipley 1978 – William F. Shipley (Shipley). Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80–90. Handbook of North American Indians, vol. 8, William C. Sturtevant, ed. Washington, D.C.: Smithsonian Institution, 1978.

5.6 Energy and Energy Resources

This section describes the environmental and regulatory setting and discusses impacts associated with the construction and operation of the proposed project specific to energy and energy resources¹.

ENERGY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.6.1 Environmental Setting

The project site is currently developed as the Eden Landing Business Park and consists of nine existing one-story buildings with a total combined square footage of approximately 167,471 square feet. The buildings are multi-tenant warehouse/office/light-industrial buildings.

Regulatory Background

Federal

Energy Star and Fuel Efficiency. At the federal level, energy standards set by the United States Environmental Protection Agency (EPA) apply to numerous consumer products and appliances. The EPA and Department of Transportation's National Highway Traffic and Safety Administration also set fuel efficiency standards for automobiles and other modes of transportation.

State

California 2022 Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Standards Code, California Code of Regulations, Title 24. The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) applies to the planning, design, operation,

¹ This section includes staff's analysis of the project's potential impact on Energy Resources, as required by Public Resources Code section 25541 when considering a Small Power Plant Exemption

construction, use, and occupancy of newly constructed buildings and requires the installation of energy- and water-efficient indoor infrastructure.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018. Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. This requirement applies to PG&E, the primary provider of energy for the project. The bill also requires the Public Utilities Commission, California Energy Commission, and State Air Resources Board to utilize programs authorized under existing statutes to meet the state policy goal of 100 percent of total retail sales of electricity in California provided by eligible renewable energy resources and zero-carbon resources by December 31, 2045.

Local

City of Hayward 2040 General Plan. The General Plan was adopted by the Hayward City Council in July 2014. The General Plan Natural Resources Element includes Goal 4 for Energy Resources and Efficiency and applicable policies to the proposed project are summarized below:

- NR-4.1: Promote the efficient use of energy in the design, construction, maintenance and operation of facilities, infrastructure, and equipment.
- NR-4.2: Promote energy efficiency, conservation, and waste reduction measures.
- NR-4.3: Encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources through the life of a structure.
- NR-4.11: Requires newly constructed building to meet energy efficient design and operation standards.

5.6.2 Environmental Impacts

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Less Than Significant Impact. Construction vehicles and equipment would consume nonrenewable energy resources, primarily fossil fuels (oil, gasoline, and diesel) during short-term and temporary project construction activities. It is anticipated that these nonrenewable energy resources would be used efficiently during construction activities and would not result in significant long-term depletion of these energy resources or

permanently increase the project's reliance on them. Under mitigation measure AQ-1, the proposed project would implement measures to minimize the idling (e.g., limit idling to 5 minutes or less) of construction equipment and would require all such equipment to be maintained and properly tuned (see **Section 5.3 Air Quality** for more discussion). This would ensure that fuel consumed during construction would not be wasted through unnecessary idling or the operation of poorly maintained equipment, and not add to unnecessary air emissions. Additionally, as a requirement by the City's construction and/or demolition permit, the project would participate in the Construction & Demolition Debris Recycling Program by recycling or diverting materials generated for discard by the project to reduce the amount of demolition and construction waste going to the landfill. Diversion saves energy by reusing and recycling materials for other uses (instead of landfilling materials and using additional nonrenewable resources).

Therefore, the construction phase of the proposed project would create a less-than-significant impact on local and regional energy supplies and a less-than-significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

Operation

Less Than Significant Impact. The proposed project would consist of a three-story data center building, a security building, a utility substation, a switch yard, twenty-eight (28) diesel-fired generators (gensets), and two genset equipment yards. The genset yard serving SDJC03A would house twenty-seven (26) 2.75-megawatt (MW) backup gensets, and one 1-MW backup genset, for a total of twenty-eight (28) gensets located at the genset yard. A single 175-kilowatt (kW) backup genset for the security building (SJDC03B) would be located adjacent to the security building (DayZen 2024I). The gensets would provide uninterruptable backup power to support the data center, its cooling equipment, other general building (administration), the security building, and life safety services. The gensets would be used to provide backup power only during emergency outages when electric service provided by Pacific Gas & Electric Company (PG&E) is interrupted. The backup gensets would be electrically isolated from the PG&E electrical transmission grid with no means to deliver electricity offsite.

Twenty-seven (26) gensets would each be a Caterpillar Model 3516E (Tier 4 compliant) with a peak rated output capacity of 2.75 MW and fuel consumption rate of 193 gallons per hour (gal/hr) at full load. The 1-MW gensets would be Caterpillar Model C32 and would have a fuel consumption rate of 72 gal/hr (DayZenLLC 2023a). The 175 kW genset would be Caterpillar Model D175 and would have a fuel consumption rate of 51 gal/hr. CEC staff (staff) has verified the output capacity and rate of fuel consumption of these gensets from their product sheets (Caterpillar 2023). The maximum electrical load requirement of the data center would be 67.2 MW, which includes the electrical power load of the Information Technology (IT) servers, the cooling load of the data center buildings, as well as the facility's ancillary loads. See **Section 3.8 Project Description**

for further information. For the purposes of testing and maintenance, only one genset would run at any given time.

The backup gensets would operate for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. Bay Area Air Quality Management District's (BAAQMD) Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance) (DayZenLLC 2023a). The primary fuel for the gensets would be renewable diesel (to the maximum extent feasible), with ultra-low sulfur diesel (ULSD or conventional) as backup fuel (DayZenLLC 2024). Renewable diesel is a direct replacement alternative to conventional diesel fuel for the project's gensets. It is not a fossil fuel and is made of nonpetroleum renewable resources (vegetable oil or other biomass feedstock such as wood, agricultural waste, garbage, etc.). Renewable diesel is produced through various thermochemical processes, such as hydrotreating, gasification, and pyrolysis. Please note that renewable diesel is not the same as biodiesel and has different fuel properties than biodiesel. Biodiesel is produced through transesterification, which is a chemical process that converts fats and oils into fatty acid methyl esters.

The total quantities of renewable diesel or ULSD diesel fuel used for all the gensets operating at full load would be approximate 6,350 barrels per year (bbl/yr).² California has a renewable diesel and ULSD fuel supply of approximately 6,300,000 bbl/yr³ and 310,000,000 bbl/yr,⁴ respectively. The project's use of fuel constitutes a small fraction of the renewable diesel and ULSD's available resources (less than 0.1 and 0.002 percent, respectively)—the supply from the combination of these two resources is more than sufficient to meet the project's necessary demand. Moreover, the current supply of renewable diesel does not account for more refineries that are coming online, and any import supply. Future and import supply would bolster renewable diesel's available resource.

Since the project would use renewable diesel, with ULSD as backup supply, the project's use of fuel on energy resources would be less than significant.

2 Calculated as: $(50 \text{ hr/yr} \times (193 \text{ gal/hr} \times 27 \text{ generators} + 72 \text{ gal/hr} + 51 \text{ gal/hr})) = 266,700 \text{ gallons per year} = 6,350 \text{ bbl/yr}$.

3 This is the annual production of 265,000,000 gallons obtained from the U.S. Energy Information Administration's U.S. Renewable Diesel Fuel and Other Biofuels Plant Production Capacity as of January 1, 2022.

4 This is the sum of the annual production of 108,657,000 bbl and available stocks of 202,075,000 bbl obtained from the Energy Commission's Weekly Fuels Watch Report for 2022 (latest annual report available).

It is important to note that maintenance and readiness testing of the gensets are crucial to the project's viability. The most important data center criterion is reliability. Crucial public services, such as the 911, Offices of Emergency Management, and utility infrastructure, are increasingly using data centers for their operation. The reliability and data security requirements of a data center would be compromised by limiting or reducing fuel consumption for maintenance and readiness testing. This includes both the primary and redundant gensets. Even though the redundant gensets are purposed to provide backup service to the primary gensets, their operational reliability is equally important, and they are designed to start up at the same time as the primary gensets during emergency operations, with each genset running at 80 percent capacity (DayZenLLC 2023a). If any of the primary gensets fails to operate, a redundant one must be immediately ready to run to take up the lost load. So, it is crucial that the redundant gensets be regularly tested and maintained according to the same testing and maintenance requirements as the primary ones and as prescribed by the manufacturer's warranty conditions. Therefore, the use of diesel fuel for the gensets for readiness testing and maintenance would not be wasteful, inefficient, or unnecessary.

The gensets would use diesel and lubricating oils. However, the use of the standby gensets for emergency purposes would be limited to times when there is an interruption of PG&E's delivery of electric service or other rare emergencies that would require the facility to switch to genset use. Under emergency conditions, defined as the loss of electrical power to the data center, which are infrequent and short-duration events, the gensets could operate and use diesel fuel, as necessary, to maintain data center operations. Data centers, such as this one, could voluntarily participate in CPUC's Emergency Load Reduction Program or in CEC's Demand Side Grid Support Program, in which case, they would disconnect from the grid and use their on-site generators to supply their own electricity in the event of an energy shortage emergency. However, based on data between 2001 and 2020, energy shortages are rare events. Such events have not impacted PG&E customers directly and staff expects their effects to decrease over time; see **Appendix B Power Delivery System** for more discussion.

The Caterpillar generator models selected for this project have an efficiency rating comparable to other Tier 4 commercially available diesel-fueled generators of similar generating capacity.

Power Usage Effectiveness (PUE) is a metric used to compare the energy efficiency of facilities that house computer servers. It is a common metric for determining how effectively a data center's infrastructure systems can deliver power to the computer systems it houses. PUE was published in 2016 as a global standard under the International Organization for Standardization, the International Electrotechnical Commission, as well as the European Standards (ISO 20160, European Standards 2016). It is defined as the ratio of total facility energy draw (including the facility's mechanical and electrical loads) to IT server electrical power draw ($PUE = \text{total facility source energy [including the IT source energy]} / \text{IT source energy}$). This approach to

calculating a data center's energy efficiency is similar to the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) Energy Standard for Data Centers (ASHRAE 90.4). However, there is a notable difference: ASHRAE 90.4, which intends to tackle and regulate poorer performers, calculates energy efficiency by providing an alternative path that allows tradeoffs between mechanical and electrical loads, particularly within existing, older data centers, while the PUE is a more appropriate path to determining a new data center's energy efficiency.

A PUE of 2 means that the data center must draw two watts of electricity for each watt of power consumed by the IT server equipment. While the PUE is always greater than 1, the closer it is to 1, the greater the portion of the power drawn by the facility that goes to the IT server equipment.

The PUE has been used as a guideline for assessing and comparing energy and power efficiencies associated with data centers since 2007 (ASHRAE 2016). It must be noted that the PUE metric was designed to compare facilities of similar size and within similar climatic conditions. PUE factors started around 2.0, but values have since been migrating down to 1.25 or lower, demonstrating a significant improvement in efficient energy usage over the years. A facility with a PUE of 1.5-2.0 is considered "efficient" while one with a PUE of 1.2-1.5 is considered "very efficient."

The peak PUE for the project would be 1.28, and its annual average PUE would be 1.15 (DayZenLLC 2023a). The project's peak operation PUE estimate is based on design assumptions and represents the worst case; that is, the hottest day with all server bays occupied and all servers operating at 100 percent capacity.

The proposed project would be constructed in accordance with the 2022 California Green Building Standards Code and would include green building measures to reduce energy consumption. Examples of these measures include:

- Utilizing lighting control to reduce energy usage; and
- Air economization⁵ integrated into the central air handling system for building cooling.

The proposed project's consumption of energy resources during operation would not be wasteful, inefficient, or unnecessary. Thus, project operation would have a less-than-significant adverse effect on local or regional energy supplies and resources.

⁵ An air economizer is a ducting arrangement, including dampers, linkages, and an automatic control system that allows a cooling supply fan system to supply outside air to reduce or eliminate the need for mechanical cooling.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction and Operation

No Impact. During operation, the project would use energy resources in PG&E's portfolio of resources. PG&E's 2022 Integrated Resource Plan identifies that it expects to meet or exceed 70 percent of eligible renewable resources by 2030 (PG&E 2022a). PG&E's 2022 power mix was composed of approximately 38.3 percent eligible renewable, 7.6 percent large hydroelectric, 4.8 percent natural gas, and 49.3 percent nuclear power. In addition, PG&E offers customers 100 percent carbon-free renewable electricity (PG&E 2022b).

The proposed project would participate in PG&E's 100 percent carbon-free electricity program (DayZennLLC 2023a, Section 4.8.2). Therefore, the proposed project would not obstruct PG&E's compliance with a state plan for renewable energy.

In addition, the proposed project's use of ULSD as a backup fuel for the gensets' primary fuel would not obstruct or inhibit the state from achieving its energy-related goals. As previously mentioned, the gensets would operate only during routine testing and maintenance (limited to 50 hours per genset), and in the rare case of emergencies to serve the project and not the wider electric grid. See **Sections 5.3 Air Quality and 5.8 Greenhouse Gas** for more discussion.

The proposed project through energy-efficient design, use of renewable diesel fuel, and renewable electricity use from PG&E (its primary electricity source), would neither conflict with, nor obstruct state or local plans for renewable energy or energy efficiency. Therefore, the proposed project would have no impact on those plans.

5.6.3 Mitigation Measures

None.

5.6.4 References

- ASHRAE 2016 – American Society of Heating, Refrigerating, and Air-conditioning Engineers ASHRAE Journal (ASHRAE). Article: Supercomputers, Super Efficiency, pp. 38-39. Published in January 2016. Accessed online at: <https://technologyportal.ashrae.org/journal/articledetail/1670>
- Caterpillar 2022 – Caterpillar. Diesel Generator Sets. Accessed: April 5, 2022. Accessed online at: https://www.cat.com/en_US/products/new/power-systems/electric-power/diesel-generator-sets.html
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024I – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

European Standards 2016 – European Standards. CSN EN 50600-4-2 Information technology – Data centre facilities and infrastructures – Part 4-1: Power Usage Effectiveness. Released 2016. Accessed online at: <https://www.en-standard.eu/csn-en-50600-4-2-information-technology-data-centre-facilities-and-infrastructures-part-4-2-power-usage-effectiveness/>

ISO 2016 – ISO. ISO/IEC 30134-2:2016, Information technology – Data centres – key performance indicators – Part 2: Power usage effectiveness (PUE). Published April 2016. Accessed online at: <https://www.iso.org/standard/63451.html>

PG&E 2022a – Pacific Gas and Electric (PG&E). PG&E's 2022 Integrated Resource Plan, dated November 1, 2022. Accessed online:
<https://www.pge.com/en/about/doing-business-with-pge/integrated-resource-planning.html>

PG&E 2022b – Pacific Gas and Electric (PG&E). PG&E's 2022 1023 Power Content Label, dated 2022. Accessed online:
<https://www.pge.com/content/dam/pge/docs/account/billing-and-assistance/bill-inserts/1023-Power-Content-Label.pdf>

5.7 Geology and Soils

This section describes the environmental setting and regulatory background and discusses impacts, associated with the construction and operation of the project with respect to geology and soils.

GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on geologic units 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code, creating substantial direct or indirect risks to life or property?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Geology and Soils question (d) reflects the current 2022 California Building Code (CBC), effective January 1, 2023, which is based on the International Building Code (2021).
Environmental checklist established by CEQA Guidelines, Appendix G.

5.7.1 Environmental Setting

Analysis of existing data included reviews of publicly available literature, maps, air photos, and documents. The geologic map review of the project area included maps

published by the U.S. Geological Survey (Halley and Graymer 1997 and Graymer 2000). A paleontological record search of the University of California Museum of Paleontology, Berkeley online paleontological database was conducted for the project area, including a 10-mile buffer zone surrounding the project site (UCMP 2024).

Paleontological Sensitivity

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata, ranging from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for their information about the history of the earth and its past ecological settings. The California Public Resources Code section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor.

Regional Geologic Setting

The proposed project site is situated in the Coast Ranges geomorphic province southern ranges section (**Figure 5.7-1**). The northern and southern ranges are separated by a depression containing the San Francisco Bay. The Coast Ranges contain many elongate ridges and narrow valleys that are approximately parallel to the coast, although the coast trends slightly northward more than the ridges and valleys (Norris and Webb 1990). The differences between the two ranges occur because the northern ranges lie east of the San Andreas Fault zone, whereas the southern ranges predominantly lie to the west (Norris and Webb 1990). The northern ranges and portions of the southern ranges east of the San Andreas Fault zone are generally underlain by strongly deformed Franciscan subduction complex rocks, and the areas west of the San Andreas Fault zone, in both the northern and southern ranges, are generally underlain by a strongly deformed granitic-metamorphic complex known as the Salinian block. The basement rock beneath the project site, which lies east of the San Andreas Fault zone consists of Franciscan Complex rocks (Norris and Webb 1990).



Local Geology

The project site is located about four miles east of the San Francisco Bay. Based on review of explorations completed as part of the preliminary geotechnical investigation prepared by Cornerstone Earth Group (Cornerstone), dated August 4, 2022, as well as geologic maps of the area (Helley and Graymer 1997 and Graymer 2000), the site is underlain by Holocene age fan and basin deposits (Qhaf and Qhb). The fan deposits (Qhaf) are generally described as medium dense to dense, gravelly sand or sandy gravel, grading upward to sandy or silty clay (Graymer 2000). These deposits may contain localized layers, lenses, and stringers of silt and sand. The basin deposits (Qhb) are generally described as very fine silty clays and clays deposited near the distal edge of alluvial fans and adjacent to Holocene-age Bay Mud or Young Bay Mud, which may extend partially onto the western or southern edge of the site (Graymer 2000). The Holocene age fan and basin deposits are generally underlain by older alluvial fan deposits collectively referred to as Pleistocene-age Older Bay Mud or Old Bay Clay. These older alluvial soils generally consist of clays, sands, silts and localized gravel layers (DayZenLLC 2023ad).

According to the United States Geological Survey, 7.5-Minute Topographic Map for Hayward the site slopes gently southward towards Mount Eden Creek, located just over half a mile south of the project site. Site elevations range from about 15 feet in the south to about 22 feet in the north (USGS 1993). There are no unique geologic features on or adjacent to the project site. Erosion hazards are limited and there are no landslide hazards.

Groundwater

Groundwater in the project area has been historically high. Cornerstone encountered groundwater in their exploratory borings at depths ranging from about 8 to 9 feet below current grades (DayZenLLC 2023d). Cornerstone also inferred groundwater at depths ranging from approximately 7 to 10 feet below existing grades in their cone penetration test (CPT) explorations based on pore pressure dissipation tests. The Seismic Hazard Zones Report for the Hayward 7.5-Minute Quadrangle, Report 091, maps groundwater at depths of less than 10 feet below the current grades in the vicinity of the site (CGS 2003).

Cornerstone also reviewed groundwater data available online from the State Water Resources Control Board website GeoTracker. Nearby monitoring well data indicates that groundwater has been measured at depths ranging between about 2½ to 15 feet below the ground surface (SWRCB 2023). Based on this, Cornerstone used a design groundwater depth of 5 feet below the ground surface in their analyses.

Fluctuations in the level of the groundwater may occur due to variations in rainfall, underground drainage patterns, and other factors not evident at the time measurements were made.

Seismicity and Seismic Hazards

The San Francisco Bay Area is one of the most seismically active areas in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined active fault zones of the San Andreas Fault system (**Figure 5.7-2**), which regionally trend in a northwesterly direction (CGS 2010). Higher levels of shaking and damage would be expected from earthquakes occurring along faults at closer distances to the project site.

While seismologists cannot predict earthquake events, geologists from the United States Geological Survey have recently updated (in 2015) earlier estimates from their 2014 Uniform California Earthquake Rupture Forecast, Version (UCERF3) publication (Field et al. 2013). The estimated probability of one or more magnitude 6.7 earthquakes (the size of the destructive 1994 Northridge earthquake) expected to occur somewhere in the San Francisco Bay Area has been revised (increased) to 72 percent for the period 2014 to 2043 (Aagaard et al., 2016). The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward Fault (DayZenLLC 2023d).

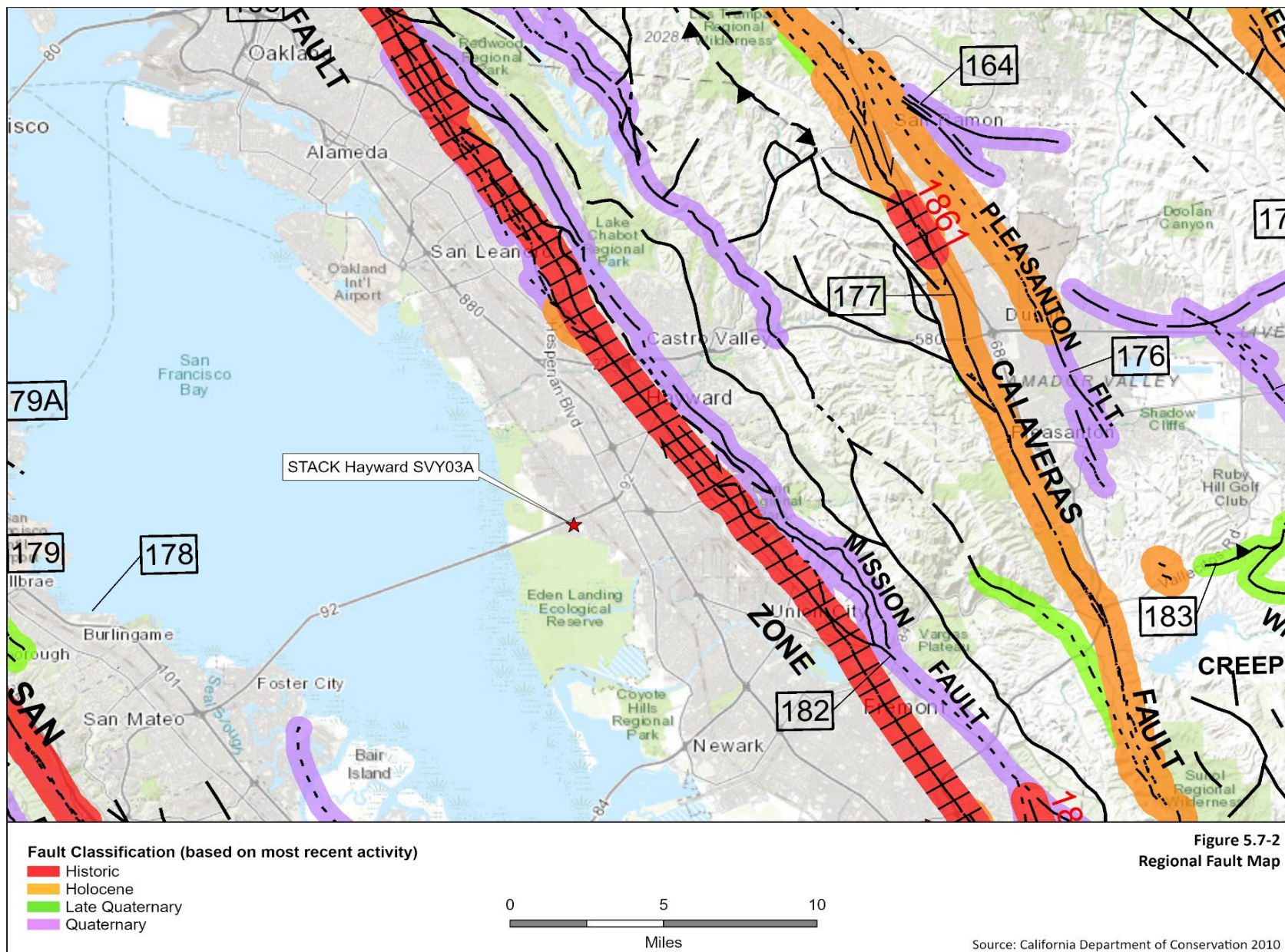
The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. The table below presents the State-considered active faults within 25 kilometers (15½ miles) of the site.

Fault Name	Approximate Distance from Site	
	(miles)	(kilometers)
Hayward	3.7	5.9
Calaveras	11.0	17.7
San Andreas (1906)	14.6	23.5
Monte Vista-Shannon	14.8	23.8

Source: (DayZenLLC 2023d)

The site is not located within an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act and there are no known active or potentially active faults crossing the project site. However, because of the proximity of the site to major active faults, ground shaking, ground failure, or liquefaction due to an earthquake could cause damage to the structures.

Structural design of facilities in California are required to incorporate design features to ensure public safety if a seismic event generates sufficient ground motion to impact the structural integrity of the facility in accordance with the CBC (CBC 2022).



Soils

Based on the borings conducted at the project site as part of the preliminary geotechnical investigation (DayZenLLC 2023d), the borings encountered undocumented fill consisting of very stiff sandy lean clay to a depth of about 2 feet below existing pavements. Beneath the undocumented fill, the borings encountered very stiff lean clay with varying amounts of sand to depths of about 8½ to 9 feet underlain by medium stiff lean clay with varying amounts of sand to a depth of about 12 to 15½ feet. Boring EB-1 encountered a thin layer of loose silty sand at a depth of about 8 feet. Beneath the medium stiff clay, Boring EB-1 encountered a layer of loose clayey sand to a depth of about 14½ feet underlain by medium stiff clay to a depth of about 17 feet. Beneath the medium stiff clays, Boring EB-1 encountered stiff to very stiff lean clays with varying amounts of sand to a depth of 32 feet underlain by medium dense clayey sand to a depth of 33 feet, loose well-graded sand with silt and gravel to a depth of about 38 feet, and stiff lean clay with varying amounts of sand to the terminal boring depth of 40 feet. Beneath the medium stiff clays, Boring EB-2 encountered stiff to very stiff clays with varying amounts of sand to a depth of about 73½ feet underlain by loose to medium dense poorly graded sand to a depth of about 79½ feet and stiff lean clay with varying amounts of sand to the terminal boring depth of 80 feet. (DayZenLLC 2023d)

The CPT explorations encountered medium stiff to very stiff clays and silts with thin, interbedded layers of loose to dense sands to a depth of about 65 to 70 feet underlain by interbedded layers of very stiff to hard clays and silts and medium dense to dense sands and gravels to the maximum depth explored by the CPTs of about 125 feet. (DayZenLLC 2023d)

The site is generally blanketed by moderately expansive surficial soils. Expansive soils can undergo significant volume change with changes in moisture content, shrinking and hardening when dried and expanding and softening when wetted. To reduce the potential for damage to the planned structures, slabs-on-grade should have sufficient reinforcement and be supported on a layer of non-expansive fill; footings should extend below the zone of seasonal moisture fluctuation. In addition, it is important to limit moisture changes in the surficial soils by using positive drainage away from buildings as well as limiting landscaping watering.

Liquefaction

During strong ground shaking, loose, saturated, cohesionless soils can experience a temporary loss of shear strength and act as a fluid, a phenomenon known as liquefaction. Liquefaction depends on the depth to water, grain size distribution, relative soil density, degree of saturation, and intensity and duration of the earthquake. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface (Youd et al. 2001).

The project site is within a State-designated Liquefaction Hazard Zone (CGS, 2003). Field and laboratory testing performed as part of the preliminary geotechnical

investigation (DayZenLLC 2023d) addressed the potential for liquefaction by sampling potentially liquefiable layers to depths of up to 50 feet, performing visual classification on sampled materials, performing laboratory tests to further classify soil properties, and performing liquefaction analyses on targeted layers.

Cornerstone's analyses indicate several layers could potentially experience liquefaction triggering that could result in post-liquefaction total settlement at the ground surface ranging from less than ¼-inch up to about ⅓-inch based on the Yoshimine method (Yoshimine 2006). As discussed in California Geologic Survey, Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008), differential movement for level ground sites over deep soil sites will be up to about two-thirds of the total settlement between independent foundation elements. Based on their analyses, Cornerstone anticipates differential settlements to be on the order of ¼-inch or less over a horizontal distance of 30 to 60 feet.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

There are no open faces within a distance considered susceptible to lateral spreading; therefore, the potential for lateral spreading to affect the project site is low.

Seismic Settlement/Unsaturated Sand Shaking

Loose unsaturated sandy soils can settle during strong seismic shaking. As the soils encountered at the site were predominantly stiff to very stiff clays and medium dense to dense sands, the potential for significant differential seismic settlement affecting the proposed improvements is low.

Regulatory Background

The project would be required to comply with all applicable federal, state, and local laws and regulations and would need to obtain building permits that would be issued by the city of Hayward. The issuance of the building permits and oversight provided by the city would confirm that the project complies with the applicable regulatory framework.

Federal

Federal Clean Water Act and State Porter-Cologne Water Quality Control Act – Construction Site Discharges. Under the federal Clean Water Act, discharge of storm water from construction sites must comply with the conditions of a National Pollutant Discharge Elimination System permit. The State Water Resources Control Board (SWRCB) has adopted a statewide General Permit for Storm Water Discharges

Associated with Construction and Land Disturbance Activities (Construction General Permit) that applies to projects resulting in one or more acres of soil disturbance. A construction Storm Water Pollution Prevention Plan (SWPPP) is required for projects disturbing more than one acre of soil, specifying site management activities to be implemented during site development. These management activities include construction storm water best management practices (BMPs); erosion and sedimentation controls; dewatering; runoff controls; and construction equipment maintenance. The SWRCB requires a Notice of Intent (NOI) to be filed prior to any storm water discharge from construction activities, and that the SWPPP be implemented and maintained onsite.

Paleontological Resources Preservation Act. The Paleontological Resources Preservation Act of 2009 (PRPA) (16 U.S.C. § 470aaa 1-11) was enacted on March 30, 2009, within the Omnibus Public Land Management Act of 2009, to provide guidance related to the management, collection, and curation of paleontological resources from federal lands.

In 2020, to clarify and ensure uniform implementation of the PRPA, the Department of the Interior provided additional guidance to the PRPA under rule 43 of the Code of Federal Regulations (CFR) by adding a new part 49 entitled "Paleontological Resources Preservation." In accordance with 16 U.S.C. 470aaa-1, the rule outlines how the four bureaus (Bureau of Reclamation, Bureau of Land Management, the U.S. Fish and Wildlife Service, and the National Park Service) manage, protect, and preserve paleontological resources on Federal land using scientific principles and expertise.

Together PRPA and the regulations at Part 49 require the bureaus to:

- Manage paleontological resources using scientific principles and expertise.
- Maintain program of inventory and monitoring of paleontological resources.
- Establish an education program to increase public awareness about paleontological resources.

The regulations also:

- Implement a program of permitting for the collection of paleontological resources.
- Require bureaus to preserve paleontological objects for the public in approved museum collections.
- Provide for casual collection of common non-vertebrate fossils by the public without a permit (BLM and Reclamation lands only).

State

Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with

surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act. The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Code. The California Building Code (CBC) prescribes standards for constructing safer buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years, with the 2022 CBC effective on January 1, 2023.

California Division of Occupational Safety and Health Regulations. Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

State Paleontological Laws, Ordinances, Regulations, and Standards. The California Public Resources Code (Section 5097.5) specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the California Environmental Quality Act (CEQA) Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

CEQA encourages the protection of all aspects of the environment by requiring state and local agencies to prepare multidisciplinary analyses of the environmental impacts of a project and to make decisions based on the findings of those analyses. CEQA includes in its definition of historical resources, any object or site that “has yielded, or may be likely to yield, information important in prehistory” (California Code Regulations, title 14, § 15064.5(a)(3)(D)), which is typically interpreted by professional scientists as including

fossil materials and other paleontological resources. More specifically, destruction of a “unique paleontological resource or site or unique geologic feature” may be a significant impact under CEQA (CEQA Guidelines Appendix G.VII (f)).

Local

City of Hayward General Plan. Staff reviewed the City of Hayward 2040 General Plan (Hayward 2014) for provisions relevant to geology and soils applicable to the project. Goal NR-6 of the general plan identifies policies related to grading and erosion control, Goal NR-7 identified the protection of paleontological resources, and Goal HAZ-2 identifies policies related to seismic safety, geological investigations, and building within fault zones.

- NR-6.4 Minimizing Grading. The city shall minimize grading and, where appropriate, consider requiring onsite retention and settling basins.
- NR-6.5 Erosion Control. The city shall concentrate new urban development in areas that are the least susceptible to soil erosion into water bodies in order to reduce water pollution.
- NR-7.1 Paleontological Resource Protection. The city shall prohibit any new public or private development that damages or destroys a historically- or prehistorically-significant fossil, ruin, or monument, or any object of antiquity.
- NR-7.2 Paleontological Resource Mitigation. The city shall develop or ensure compliance with protocols that protect or mitigate impacts to paleontological resources, including requiring grading and construction projects to cease activity when a paleontological resource is discovered so it can be safely removed.
- HAZ-2.1 Seismic Safety Codes and Provisions. The city shall enforce the seismic safety provisions of the Building Code and Alquist-Priolo Special Studies Zone Act to minimize earthquake-related hazards in new construction, particularly as they relate to high occupancy structures or buildings taller than 50 feet in height.
- HAZ-2.2 Geologic Investigations. The city shall require a geologic investigation for new construction on sites within (or partially within) the following zones:
 - Fault Zone
 - Liquefaction Zone
 - Landslide Zone

A licensed geotechnical engineer shall conduct the investigation and prepare a written report of findings and recommended mitigation measures to minimize potential risks related to seismic and geologic hazards.

- HAZ-2.4 New Buildings in a Fault Zone. The city shall prohibit the placement of any building designed for human occupancy across active faults. All buildings shall be set back from active faults by at least 50 feet. The city may require a greater setback

based on the recommendations of the licensed geotechnical engineer evaluating the site and the project.

5.7.2 Environmental Impacts

- a. Would the project 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.**

Construction

Less Than Significant Impact. The probability that construction of the proposed project would have an impact on the risk of loss, injury, or death involving rupture of an earthquake fault during construction is remote. The project site is located within the seismically active San Francisco Bay region with nearby historically active faults including the Hayward fault zone, approximately 3.7 miles to the east (**Figure 5.7-2**). However, no active or potentially active faults are known to pass directly beneath the project site. The development of the proposed project would not expose people or buildings to known risks of fault rupture because of the project site's distance from faults and the absence of known faults within or near the project site. Therefore, the proposed project construction impact would be less than significant.

Operation

Less Than Significant Impact. The probability that the operation or maintenance of the proposed project would have an impact on the risk of loss, injury, or death involving rupture of a known earthquake fault during operation is remote. There are no mapped Alquist-Priolo Special Studies Zones for active faults crossing the project site (**Figure 5.7-2**) and the zone of damage related to a fault surface rupture are limited to a relatively narrow area along either side of the fault during rupture. Therefore, the proposed project operational impact would be less than significant.

ii. Strong seismic ground shaking?

Construction

Less Than Significant Impact. Earthquakes along several nearby active faults in the region could cause strong ground shaking at the site. The intensity of ground motion and the damage caused by ground shaking would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. The design of the proposed project would include an assessment of the potential impacts of strong seismic ground

shaking from a site-specific design-level seismic event. Conformance to the applicable seismic design criteria of the CBC (CBC 2022) would minimize seismic hazards, to the extent feasible. Furthermore, recommendations for ground improvement to further reduce, to the extent feasible, the ground settlement hazard at the project site would be provided in a site-specific design-level geotechnical investigation report and incorporated into the proposed project design.

A project-specific geotechnical engineering report would be provided to the city building official for review and approval prior to the issuance of a building permit. The proposed project construction plans would be developed by the design engineer and would include the recommendations provided by the geotechnical engineer in the geotechnical engineering report. With compliance with the seismic design criteria per the current CBC (CBC 2022) and the issuance of a building permit by the city building official, the proposed project would not expose people or property, directly or indirectly, to significant impacts associated with geologic or seismic ground shaking and project construction impact would be less than significant.

Operation

Less Than Significant Impact. The proposed project could be subject to strong seismic ground shaking during operation and maintenance. However, with the implementation of the seismic design guidelines per the current CBC (CBC 2022) and the issuance of a building permit by the city building official, the proposed project would not expose people or property, directly or indirectly, to significant impacts associated with geologic or seismic ground shaking. Therefore, operational impacts of the proposed project on the safety of people or structures from strong seismic ground-shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Construction

Less Than Significant Impact. The project site is located within a state-designated liquefaction hazard zone, and there is potential for soil layers at the site to liquefy during a seismic event. Analyses indicate that several soil layers could potentially experience liquefaction that could result in post-liquefaction total settlement at the ground surface ranging from less than 1/4-inch up to about 1/3-inch and differential settlements on the order of 1/4-inch or less over a horizontal distance of 30 to 60 feet. The proposed structures would be designed and constructed in accordance with applicable provisions of the CBC (CBC 2022) that are designed to address liquefaction concerns to the extent feasible.

In addition, as discussed under CEQA criterion "ii" above, a project-specific geotechnical engineering report would be provided to the city building official for review and approval prior to the issuance of a building permit. Therefore, with compliance with the CBC seismic design criteria for ground failure, the project-specific recommendations in

the final geotechnical engineering report, and the issuance of a building permit by the city building official, the proposed project would not expose people or property to any significant direct or indirect impacts associated with geologic or seismic conditions onsite, including liquefaction.

Operation

Less Than Significant Impact. During project operation and maintenance, the proposed project could be subject to strong seismic ground shaking. However, the proposed project would be constructed to comply with the seismic design guidelines per the current CBC (CBC 2022) and the building permit requirements issued by the city building official. Therefore, the proposed project would not expose people or property, directly or indirectly, to significant impacts associated with the effects of seismic ground shaking, such as ground failure, liquefaction, or subsidence and project operational impacts would be less than significant.

iv. Landslides?

Construction

Less Than Significant Impact. The project site is very gently sloping with no open faces or slopes near the site. There is low potential for landslides and, therefore, no direct or indirect significant impacts associated with landslides are expected. Project construction impacts from landslides would be less than significant.

Operation

Less Than Significant Impact. The project site is very gently sloping with no open faces or slopes near the site. There is low potential for landslides. Construction, operation, and maintenance of the proposed project would not change the general surface morphology of the site. Therefore, no direct or indirect significant impacts associated with landslides are expected and project operational impacts would be less than significant.

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

Construction

Less Than Significant Impact. Construction activities associated with the proposed project (including excavation, trenching, and grading) would temporarily increase sedimentation and erosion by exposing soils to wind and runoff until construction is complete and new vegetation is established. As discussed in **Section 5.10 Hydrology and Water Quality**, the proposed project would be subject to construction-related storm water permit requirements. Prior to any ground-disturbing construction activity, the proposed project must comply with the Construction General Permit, which includes filing a NOI with the SWRCB, coordinating with the city, and preparing and

implementing a SWPPP. The SWPPP would include best management practices (BMPs) for storm water quality control, including soil stabilization practices, sediment control practices, and wind erosion control practices. When construction is complete, the project would be required to file a Notice of Termination with the San Francisco Bay RWQCB and the city, documenting that all elements of the SWPPP have been implemented.

By complying with existing permits and other applicable laws and regulations, substantial soil erosion or loss of topsoil would not occur; and runoff from the proposed project site would not violate the applicable waste discharge requirements or otherwise contribute to the degradation of storm water runoff quality. Therefore, construction impacts related to erosion and loss of topsoil would be less than significant.

Operation

Less Than Significant Impact. Erosion and sedimentation BMPs implemented to comply with the NPDES permit requirements would ensure the project site would not include areas of exposed topsoil subject to erosion. Surface water runoff from the facility would not be expected to impact soil erosion or cause the loss of topsoil during project operation. Any occasional minor surface disturbance required during maintenance activities would be temporary and small. Operation and maintenance work would not require surface disturbance and thereby would not result in increased erosion or topsoil loss. Therefore, no significant impact associated with erosion or loss of topsoil would occur and project operational impact would be less than significant.

c. Would the project be located on geologic units 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?

Construction

Less Than Significant Impact. The project site and immediate surrounding area are not subject to landslides or lateral spreading. The project site is in a mapped liquefaction hazard zone. The proposed project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. By complying with the seismic design guidelines per the current CBC (CBC 2022) and the issuance of a building permit by the city building official, the project impacts associated with construction on geologic units or soil that could become unstable would have a less than significant impact.

Operation

Less Than Significant Impact. Operation and maintenance activities would not change the surface runoff or geotechnical characteristics of the material beneath the proposed project facilities. Thus, operation and maintenance activities would not introduce new

soil stability hazards. Occasional minor surface disturbance required during maintenance activities would be temporary and likely small. The proposed project would not expose people or property, directly or indirectly, to unstable geologic or soil units. Therefore, project operation and maintenance activities would have a less than significant impact.

d. Would the project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2022), creating substantial direct or indirect risks to life or property?

Construction and Operation

Less Than Significant Impact. Expansive soil behavior is a condition where clay soils react to changes in moisture content by expanding or contracting. Poorly drained soils have greater shrink-swell potential. Potential causes of moisture fluctuations include drying during construction, and subsequent wetting from rain, capillary rise, landscape irrigation, and type of plant selection. If untreated, expansive soils could damage future buildings and pavements on the project site.

The project site is located on expansive soil as defined in Section 1803.5.3 of the CBC. The proposed project would be required to adhere to the CBC, which would reduce impacts related to expansive soils to a less than significant level. Therefore, risks to people or structures from expansive soil would be less than significant with compliance with CBC requirements.

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

Construction and Operation

No Impact. The proposed project would connect to an existing city provided sanitary sewer connection and the project site would not need to support septic tanks or alternative wastewater disposal systems. Therefore, there would be no project impact to soils because of sanitary waste disposal from the project during construction or operation.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Construction

Less Than Significant with Mitigation Incorporated. There are no known paleontological resources within the project site. A search of the University of California Museum of Paleontology database did not identify any paleontological resources at the project site. However, the database search indicated fossil discoveries have been documented in geologic formations east of the project site in the nearby ranges (UCMP 2024). Ground-disturbing activities of ten feet or more have the potential to impact undiscovered

paleontological resources. Although unlikely, paleontological resources could be encountered during construction of the project.

The applicant has proposed a measure to reduce impacts to unique paleontological resources. The measure includes protocols for training, identification of paleontological resources, and preparing a salvage plan, including treatment and reporting. Staff considers the measure sufficient to reduce impacts to paleontological resources and proposes **GEO-1** to address the potential for the discovery of paleontological resources during excavation in native materials.

With the implementation of **GEO-1**, impacts to paleontological resources would be reduced to a less than significant level.

There are no unique geologic features within the site footprint. Therefore, the proposed project would not directly or indirectly destroy a unique geologic feature and no project impact on geologic features would result.

Operation

Less Than Significant Impact. There is little potential to disturb paleontological resources during operation because there would be no earth-moving activities required for operation. Occasional minor surface disturbance may be required during maintenance activities, but such disturbance would be temporary, small, and most likely limited to the disturbance of fill. There are no unique geologic features within the site footprint. Therefore, the proposed project would not directly or indirectly destroy a unique geologic feature and no project impact on geologic features would result.

5.7.3 Mitigation Measures

GEO-1:

- Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers are halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.
- Prior to the start of construction, the applicant shall secure the services of a qualified paleontologist specialist, as defined by the Society of Vertebrate Paleontology. The specialist shall prepare a Worker Environmental Awareness Program to instruct site workers of the obligation to protect and preserve valuable paleontological resources for review by the city's Planning Manager. This program shall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or

visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential paleontological resources encountered; and measures to notify their supervisor, the applicant, and the qualified paleontologist specialist.

- If a fossil is encountered and determined to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in the immediate area shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected shall be cleaned, repaired, sorted, and cataloged, along with copies of all pertinent field notes, photos, and maps.
- The paleontologist shall prepare a paleontological resource monitoring report that outlines the results of the monitoring program and any encountered fossils. The report shall be submitted to the city's Planning Division Manager or their or designee for review and approval. The report and any fossil remains collected shall be submitted to a scientific institution with paleontological collections.

5.7.4 References

- Aagaard et al. 2016 – B.T Aagaard, J.L., Blair, J. Boatwright, S.H Garcia, R.A. Harris, A.J. Michael, D.P. Schwartz, and J.S. DiLeo. Earthquake Outlook for the San Francisco Bay Region 2014–2043 (ver. 1.1, August 2016), U.S. Geological Survey Fact Sheet 2016–3020, 6. 2016. Accessed by applicant. Accessed online at: <https://pubs.usgs.gov/fs/2016/3020/fs20163020.pdf>
- CBC 2022 – California Building Code (CBC). California Building Standard Commission. Accessed on: February 2, 2024. Accessed online at: <http://www.bsc.ca.gov/Codes.aspx>
- CGS 2003 – California Geological Survey (CGS), California Department of Conservation. Seismic Hazard Zones Report for the Hayward 7.5-Minute Quadrangle, Report 091. Accessed on: February 2, 2024. Accessed online at: <https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/>
- CGS 2008 – California Geological Survey (CGS), California Department of Conservation. Guidelines for Evaluating and Mitigating Seismic Hazards in California. Accessed by applicant. Accessed online at: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_117a.pdf
- CGS 2010 – California Geological Survey (CGS), California Department of Conservation. Fault Activity Map of California. Accessed on: February 2, 2024. Accessed online at: <http://maps.conservation.ca.gov/cgs/fam/>
- Field et al. 2013 – E.H. Field, G.P. Biasi, P. Bird, T.E. Dawson, K.R. Felzer, D. D. Jackson, K.M. Johnson, T.H. Jordan, C. Madden, A. J. Michael, K. R. Milner, M. T. Page, T. Parsons, P.M. Powers, B.E. Shaw, W.R. Thatcher, R.J. Weldon II, and Y.

- Zeng. Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3)—The time-independent model: U.S. Geological Survey Open-File Report 2013–1165, 97 p., California Geological Survey Special Report 228, and Southern California Earthquake Center Publication 1792. 2013. Accessed by applicant. Accessed online at: <http://pubs.usgs.gov/of/2013/1165/>
- Graymer 2000 – R. W. Graymer. Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California: U.S. Geological Survey Miscellaneous Field Studies 2342, Version 1.0. 2000. Accessed on: February 2, 2024. Accessed online at: <https://pubs.usgs.gov/mf/2000/2342/>
- Helley and Graymer 1997 – E.J. Helley and R. W. Graymer. Quaternary Geology of Alameda County, and parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin Counties, California: A Digital Database: U.S. Geological Survey Open-File Report 97-97. 1997. Accessed on: February 2, 2024. Accessed online at: <https://www.usgs.gov/publications/quaternary-geology-alameda-county-and-parts-contra-costa-santa-clara-san-mateo-san>
- Hayward 2014 – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. 2014. Accessed on: February 2, 2024. Accessed online at: <https://www.hayward-ca.gov/your-government/documents/planning-documents>
- Norris and Webb 1990 – Robert M. Norris and Robert W. Webb, 1990, *Geology of California*, Second Edition, John Wiley and Sons. ISBN-13: 978-0471509806. Accessed on: February 7, 2024
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023d – DayZenLLC. (TN 252252). STACK SVY03A – SPPE Application – Appendices C - E, Part IV of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- SVP 2010 – Society of Vertebrate Paleontology (SVP). Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 2010. Accessed on: February 12, 2024. Accessed online at: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf
- State Water Resource Control Board (SWRCB). State of California. Accessed by applicant. Accessed online at: <https://geotracker.waterboards.ca.gov/>.
- UCMP 2024 – University of California Museum of Paleontology (UCMP) 2021. *UCMP database*. Accessed on: February 2, 2024. Accessed online at: <http://ucmpdb.berkeley.edu/>

- USGS 1993 – United States Geological Survey (USGS). Hayward Quadrangle, California, 7.5-Minute Series (Topographic). 1993. Accessed on: February 2, 2024. Accessed online at: <https://livingatlas.arcgis.com/topoexplorer/index.html>
- Youd et al. 2001 – T. L. Youd, I. M. Idriss, Ronald D. Andrus, Ignacio Arango, Gonzalo Castro, John T. Christian, Richardo Dobry, W. D. Liam Finn, Leslie F. Harder, Mary Ellen Hynes, Kenji Ishihara, Joseph P. Koester, Sam S.C. Liao, William F. Marcuson, Geoffrey R. Martin, James K. Mitchell, Yoshiharu Moriwaki, Maurice S. Power, Peter K. Robertson, Raymond B. Seed, and Kenneth H. Stokoe "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils." ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vol 127, No. 10. October. Accessed on: February 2, 2024. Accessed online at: <http://www.ce.memphis.edu/7137/PDFs/Reference2/Youd%20ad%20Idriss.pdf>
- Yoshimine et al. 2006 – M. Yoshimine, H. Nishizaki, K. I. Amano, and Y. Hosono. Flow Deformation of Liquefied Sand Under Constant Shear Load and Its Application to Analysis of Flow Slide in Infinite Slope, Soil Dynamics and Earthquake Eng. 26, 253-264. 2006. Accessed by applicant. Accessed online at: <https://www.sciencedirect.com/science/article/abs/pii/S0267726105000837?via%3Dihub>

5.8 Greenhouse Gas Emissions

This section describes the environmental and regulatory setting and discusses greenhouse gas (GHG) emissions impacts associated with the demolition/construction, direct "stationary source" emissions from emergency backup generators (gensets), and indirect and "non-stationary source" emissions from the operation of the project.

GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established CEQA Guidelines, Appendix G.

5.8.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs have a much broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the Earth's atmosphere. The principal GHGs that contribute to global warming and climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), black carbon, and fluorinated gases (F-gases) (hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆])¹. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors².

Each GHG has its own potency and effect upon the Earth's energy balance, expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1. Specifically, the GWP is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given time relative to the emissions of 1 ton of CO₂. The larger the GWP, the more that a given gas warms the Earth compared to CO₂ over that time. The time usually used for GWPs is 100 years³.

1 US. EPA. Overview of Greenhouse Gases, which is available online at: <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

2 US. EPA. Sources of Greenhouse Gas Emissions, which is available online at <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

3 US. EPA. Understanding Global Warming Potentials, which is available online at <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>

For example, CH₄ has a GWP of 28 over 100 years from the Fifth Assessment Report (AR5)⁴ of the Intergovernmental Panel on Climate Change (IPCC 2013), which means that it has a global warming effect 28 times greater than CO₂ on an equal-mass basis. The F-gases are sometimes called high-GWP gases because, for a given amount of mass, they trap substantially more heat than CO₂. The GWPs for these gases can be in the thousands or tens of thousands. The carbon dioxide equivalent (CO₂e) for a source is obtained by multiplying each quantity of GHG by its GWP and then adding the results together to obtain a single, combined emission rate representing all GHGs in terms of CO₂e.

Regulatory Background

Federal

The project would not be subject to any federal requirements for GHGs.

State

California Global Warming Solutions Act of 2006. In 2006, the state Legislature passed the California Global Warming Solutions Act of 2006 (Assembly Bill 32, Núñez, Chapter 488, Statutes of 2006), codified as Health and Safety Code, section 38500 and the following, which provided the initial framework for regulating GHG emissions in California. This law required CARB to design and implement GHG emissions limits, regulations, and other measures such that statewide GHG emissions are reduced in a technologically feasible and cost-effective manner to 1990 levels by 2020. AB 32 also required CARB to implement a mandatory GHG emissions reporting program for major sources, which includes electricity generators, industrial facilities, fuel suppliers, and electricity importers.

CARB Scoping Plan. Part of the Legislature's direction to CARB under AB 32 was to develop a scoping plan that serves as a statewide planning document to coordinate the main strategies California will use to reduce GHG emissions that cause climate change. CARB approved the AB 32 Climate Change Scoping Plan (Scoping Plan) in 2008 and released updates in 2014, 2017 and 2022. The Scoping Plan includes a range of GHG emissions reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based compliance mechanisms, such as the cap-and-trade program. In December 2007, CARB set the statewide 2020 emissions limit, defined as reducing emissions to 1990 levels, at 427 million metric tons of CO₂e (MMTCO₂e). The 2014 Scoping Plan adjusted the 1990 emissions estimate and the statewide 2020 emissions limit goal to 431 MMTCO₂e (CARB 2014). The 2017 Scoping Plan (CARB 2017a) demonstrates the approach necessary to achieve California's 2030 target, which is to reduce GHG

⁴ The GWP values have been refined in the 2021 IPCC Sixth Assessment Report (AR6). Available online at: <https://www.ipcc.ch/report/ar6/wg1/>. The GWP for CH₄ has been updated to 29.8 from fossil fuel sources and 27.0 from non-fossil sources.

emissions 40 percent below 1990 levels to 260 MMTCO₂e. On November 16, 2022, CARB published the 2022 Scoping Plan for Achieving Carbon Neutrality (CARB 2022b), which lays out a path to achieve targets for carbon neutrality by 2045.

Mandatory Reporting of Greenhouse Gas Emissions. AB 32 also required CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions (Health and Safety Code, section 38530). CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Cal. Code Regs., Tit. 17, §§ 95100 to 95163), which took effect January 2009, requires annual GHG emissions reporting from electric power entities, fuel suppliers, CO₂ suppliers, petroleum and natural gas system operators, and industrial facilities that emit at least 10,000 MTCO₂e/yr from stationary combustion and/or process sources. The project would not be impacted by this regulation because stationary source testing and maintenance combustion GHG emissions are expected to be below the reporting threshold of 10,000 MTCO₂e/yr, as shown in **Table 5.8-3**.

Cap-and-Trade Program. CARB's cap-and-trade program (Health and Saf. Code, § 38562; Cal. Code Regs., Tit. 17, §§ 95801 to 96022) took effect January 1, 2012. The cap-and-trade program establishes a declining limit on major sources of GHG emissions by sector throughout California, and it creates economic incentives for sources to invest in cleaner, more efficient technologies. The current version of the regulation, effective April 2019, established the increasingly stringent compliance obligations for years 2021 to 2030. The cap-and-trade program applies to covered entities that fall within certain source categories, including first deliverers of electricity (such as fossil fuel power plants) and electrical distribution utilities; in this case, the project would obtain electrical service from PG&E or Ava Community Energy (Ava). Covered entities in the cap-and-trade program, including PG&E and Ava, must hold compliance instruments sufficient to cover their actual GHG emissions, as set and verified through the CARB's Mandatory Reporting regulation. For the electricity supplied to the project from the grid, PG&E or Ava bears the GHG emissions compliance obligation under the cap-and-trade program for delivering electricity to the grid from its power plants and for making deliveries to end-users, such as the project, unless the project is otherwise a covered entity in the cap-and-trade program.

Executive Order B-30-15. On April 29, 2015, former Governor Brown issued Executive Order B-30-15, directing state agencies to implement measures to reduce GHG emissions 40 percent below their 1990 levels by 2030 and to make it possible to achieve the previously stated goal of an 80 percent GHG emissions reduction below 1990 GHG emissions by 2050 (CARB 2017a). This executive order also specifically addresses the need for climate adaptation and directs state agencies to update the California Climate Adaptation Strategy to identify how climate change will affect California infrastructure and industry and what actions the state can take to reduce the risks posed by climate change.

Statewide 2030 GHG Emissions Limit. On September 8, 2016, SB 32, codified as Health and Safety Code, section 38566, extended California’s commitment to reduce GHG emissions by requiring the state to reduce statewide GHG emissions by 40 percent below 1990 levels by 2030 (CARB 2017a).

Renewable Energy Programs. In 2002, California initially established the RPS with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. State energy agencies recommended accelerating that goal, and former Governor Schwarzenegger’s Executive Order S-14-08 (November 2008) required California utilities to reach the 33 percent renewable electricity goal by 2020, consistent with the CARB’s 2008 scoping plan. In April 2011, Senate Bill X1-2 (Simitian, Chapter 1, Statutes of 2011) of the First Extraordinary Session was signed into law. SB X1-2 expressly applied the 33 percent RPS by December 31, 2020, to all retail sellers of electricity and established renewable energy standards for interim years prior to 2020.

- Clean Energy and Pollution Reduction Act (Senate Bill (SB) 350, De León, Chapter 547, Statutes of 2015): Beginning in 2016, SB 350 took effect declaring it the intent of the Legislature to acknowledge Governor Brown’s clean energy, clean air and greenhouse gas emissions reduction goals for 2030 and beyond. SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030.
- The 100 Percent Clean Energy Act of 2018 (Senate Bill (SB) 100, De León, Chapter 312, Statutes of 2018): Beginning in 2019, the RPS deadlines advanced to 50 percent renewable resources by December 31, 2026, and 60 percent by December 31, 2030. In addition, SB 100 establishes policy that renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity by December 31, 2045.
- Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill (SB) 1020, Laird, Chapter 361, Statutes of 2022): Accelerates the timelines set forth in SB 100 to provide that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035, as specified.

Short-Lived Climate Pollutant Strategy. To best support the reduction of GHG emissions consistent with AB 32, CARB released the Short-Lived Climate Pollutant (SLCP) Strategy, under Health and Safety Code, section 39730, in March 2017. Health and Safety Code, section 39730, defined SLCPs as having lifetimes in the atmosphere ranging from “a few days to a few decades.” Then beginning in 2017 under Health and Safety Code, section 39730.5, CARB was directed to set targets to reduce SLCP emissions 40 percent below 2013 levels by 2030 for CH₄ and HFCs and 50 percent below 2013 levels by 2030 for anthropogenic black carbon (CARB 2017b). The SLCP

Strategy was integrated into the 2017 update to CARB's Scoping Plan. To help meet the HFC reduction goal, California adopted Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning and Other End-Uses (Cal. Code Regs., Tit. 17, § 95371, et seq.). The prohibited HFCs with different effective dates are listed in the regulation. In addition, on September 30, 2022, the Governor approved Senate Bill 1206 (Skinner, Chapter 884, Statutes of 2022), which would prohibit a person from offering for sale or distribution, or otherwise entering into commerce in the state, bulk HFCs or bulk blends containing HFCs that exceed a specified GWP limit beginning January 1, 2025, and lower GWP limits beginning January 1, 2030, and January 1, 2033. The bill does not restrict the authority of CARB to establish regulations lowering the maximum allowable GWP limits below the limits established by the bill.

Executive Order B-55-18. On September 10, 2018, the same day he signed SB 100 into law, former Governor Brown issued Executive Order B-55-18 to achieve carbon neutrality, stating the governor's intention "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing greenhouse gas emissions." From the 2020 GHG limit of 431 MMTCO₂e, California will need to reduce statewide emissions another 170 million tons to meet its 2030 statutory target of 260 million tons per year (40 percent below 1990 levels). The state would need to cut annual emissions by a further 175 million tons to meet its 2050 goal (set by executive order) of 85 million tons per year (80 percent below 1990 levels).

Reducing SF₆ Emissions from Gas Insulated Switchgear. In early 2011, CARB adopted a regulation (Cal. Code Regs., Tit. 17, §§ 95350 to 95359) to reduce SF₆ emissions in gas insulated switchgear (GIS) used in the electricity sector's transmission and distribution system as an early action measure pursuant to AB 32. SF₆ is an extremely powerful and long-lived GHG. The 100-year GWP of SF₆ is 22,800 (from IPCC Fourth Assessment Report), making it the most potent of the six main GHGs, according to the U.S. EPA. Because of its extremely high GWP, small reductions in SF₆ emissions can have a large impact on reducing GHG emissions, which are the main drivers of climate change. The regulation requires GIS owners to report SF₆ emissions annually and requires reductions of SF₆ emissions from GIS over time, setting an annual emission rate limit for each GIS owner. The maximum allowable emission rate started at 10 percent in 2011 and has decreased one percent per year since then. The limit reached one percent in 2020 and remained at that level going forward. However, data show that statewide SF₆ capacity is growing by one to five percent per year, which would increase the expected SF₆ emissions. In response to emerging technologies using lower or zero GWP insulators, CARB amended the regulation (Cal. Code Regs., tit. 17, §§ 95350-95359.1) in 2021 to further reduce GHG emissions from gas-insulated equipment (GIE [changed from GIS to include more devices beyond switchgear]). Key provisions of the amended regulation include a phase-out schedule in stages between

2025 and 2033 for new SF₆ GIE, coverage of other GHG beyond SF₆ used in GIE, and other changes that enhance accuracy of emissions accounting and reporting.

The California Climate Crisis Act (Assembly Bill 1279). Assembly Bill 1279 (Muratsuchi, Chapter 337, Statutes of 2022) establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage (CCUS) technologies. The CARB 2022 Scoping Plan for Achieving Carbon Neutrality (CARB 2022b) plans for the 2045 target set forth by AB 1279 and Executive Order B-55-18.

Regional

2017 Bay Area Clean Air Plan. BAAQMD adopted the 2017 Bay Area Clean Air Plan on April 19, 2017 (BAAQMD 2017). It provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how BAAQMD will continue its progress toward attaining all state and federal ambient air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG emissions reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieving those GHG emissions reduction targets.

BAAQMD CEQA Guidelines. The purpose of the BAAQMD CEQA Guidelines is to assist lead agencies in evaluating a project's air quality and climate impacts (BAAQMD 2023). This document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds of significance for determining whether a project would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. The BAAQMD CEQA Guidelines include methodologies for estimating GHG emissions.

The BAAQMD CEQA Guidelines include the project-level and plan level thresholds for climate impacts that were adopted in April 2022. The guidelines also include a bright-line threshold of significance of 10,000 MTCO₂e/yr for stationary sources (BAAQMD 2023, Section 6.4). The stationary source GHG threshold was first adopted by the BAAQMD Board of Directors on June 2, 2010. The BAAQMD staff indicates that it will reevaluate the stationary source threshold of significance as necessary to reflect substantive changes to assumptions, underlying data, analytical methodologies, state

and local policies and programs, and court decisions regarding GHG emissions since June 2010 (BAAQMD 2023, Section 2.2.5 of Appendix A).

Diesel Free by '33. In 2018, BAAQMD established a program intended to reduce GHG and criteria pollutant emissions by eliminating petroleum use by the end of 2033. Local Bay Area agencies are encouraged to voluntarily adopt the Statement of Purpose of this initiative. Entities signing the Statement of Purpose pledge to develop their own individual strategies to achieve the goal of reaching zero diesel emissions in their communities. Signatories to this agreement express their intent to:

1. Collaborate and coordinate on ordinances, policies, and procurement practices that will reduce diesel emissions to zero within their jurisdictions, communities, or companies;
2. Share and promote effective financing mechanisms domestically and internationally to the extent feasible that allow for the purchase of zero emissions equipment;
3. Share information and assessments regarding zero emissions technology;
4. Build capacity for action and technology adaptation through technology transfer and sharing expertise;
5. Use policies and incentives that assist the private sector as it moves to diesel-free fleets and buildings; and
6. Periodic reporting to all signers of progress towards the zero- diesel emissions goal.

Plan Bay Area 2040. Under the requirements of The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375, Steinberg, Chapter 728, Statutes of 2008), all metropolitan regions in California must complete a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan. In the Bay Area, the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing to meet GHG emissions reduction targets set by CARB. In July 2017, the MTC and ABAG approved Plan Bay Area 2040, which is a strategic update to the previous plan approved in July 2013. The Bay Area GHG emissions reduction targets established by CARB in September 2010 include a seven percent reduction in GHG emissions per capita from passenger vehicles by 2020 compared to 2005 emissions. Similarly, Plan Bay Area 2040 includes a target to reduce GHG emissions per capita from passenger vehicles 15 percent by 2035 compared to 2005 emissions (MTC & ABAG 2017).

Local

City of Hayward 2040 General Plan. The City Council adopted the Hayward 2040 General Plan in July 2014. The City of Hayward 2040 General Plan (General Plan) includes an integrated Climate Action Plan (CAP) and policies that address the reduction of GHG emissions during the planning horizon of the General Plan. Goals and policies that address sustainability are aimed at reducing the city's contribution to GHG emissions. As described below, the development of a comprehensive GHG emissions

reduction strategy for the city is also included in the General Plan by the incorporation of the CAP (Hayward 2014).

City of Hayward Climate Action Plan. The city has a comprehensive GHG emissions reduction strategy, referred to as the City's CAP, which was recently updated and adopted by the City Council on January 31, 2024 (Hayward 2024). The city adopted its first CAP in 2009 and updated the CAP in 2014 and incorporated it in the City's General Plan. The CAP includes implementation, monitoring, and evaluating progress through the implementation phases. The objective of the CAP update's policies and implementation programs is to reduce Hayward's GHG emissions by 20 percent below 2005 baseline levels by 2020 which had been achieved in 2019, by 30 percent below 2005 baseline levels by 2025, by 55 percent below 2005 baseline level by 2030. The final target is to work with the community to develop a plan that may result in the reduction of community-based GHG emissions to achieve net carbon neutrality by 2045 (Hayward 2024, p. 3).

The CAP update identifies existing city policies and regulations as well as new measures to be implemented by development projects in the areas of building energy use, transportation, solid waste, water and wastewater, and carbon sequestration. Projects that comply with the policies and strategies outlined in the CAP and that are consistent with the General Plan land use designation on the project site would have a less than significant GHG impact (DayZenLLC 2023a, p. 146). It also establishes GHG efficiency thresholds for residential, non-residential, and mixed-use projects built prior to December 31, 2030. For non-residential projects that are not subject to BAAQMD stationary source permitting or the State cap-and-trade program, the GHG efficiency threshold is 2.62 MTCO₂e per employee (Hayward 2023).

The CAP identifies the city's approach to achieve its share of statewide emissions reductions for the long-term. The city's original CAP, adopted on July 28, 2009, specified the strategies and measures to be taken for a number of focus areas city-wide to achieve the overall emissions reduction target. This CAP update also includes implementation and monitoring by city departments, publicly reported biannual progress of high-impact GHG reduction measures and updates of the city's GHG emissions inventory no less than every three years by the city.

The CAP Update reflects the 2030 GHG emissions limit requirements and progress toward meeting the long-term targets of Assembly Bill 1279 and Executive Order B-55-18. In addition to these targets, the city aspires to reduce emissions more aggressively in the near-term: achieve an 46 percent reduction below 1990 levels in per capita emissions by 2030 and 81 percent by 2045. The CAP Update identifies strategies and actions in these main areas: building and energy, transportation, solid waste, carbon sequestration, water resources/wastewater, and community resilience and well-being. To achieve the interim target of an 46 percent reduction in per capita population emissions by 2030, the city will take additional actions including achieve 80 percent

carbon neutral electricity at city facilities by 2030 (Measure BE-6, Hayward 2024) and require all new nonresidential construction to be all-electric by 2026 (Measure BE-1).

The CEQA Guidelines allow a lead agency to use a Qualified GHG Reduction Strategy to determine the degree to which a proposed project would cause a significant adverse impact. Compliance with appropriate measures in the CAP would ensure an individual project is not cumulatively significant under CEQA.

Pacific Gas & Electric's and Ava Community Energy's Integrated Resource Plan and Other Programs. On November 1, 2022, PG&E filed their Integrated Resource Plan (IRP) at the California Public Utilities Commission (CPUC) (PG&E 2022b). The IRP was developed as required by SB 350 and must be updated at least every five years. The IRPs provide a framework to evaluate how utilities have chosen to align with greenhouse gas emissions reduction targets as well as energy and other policy goals outlined in SB 350. The most challenging goals in the IRP call for PG&E to: (1) meet its climate strategy goal of 70 percent Renewable Portfolio Standard (RPS) by 2030, and (2) meet its broader, net zero energy system, climate goal by 2040.

In addition to carrying out activities related to their IRP, PG&E has also created a Regional Renewable Choice program to allow its large customers to sign up for 100 percent renewable energy. The Regional Renewable Choice program allows customers to subscribe directly to renewable energy from specific newly developed generation projects sized from 0.5 to 20 MW. Customers contract directly with a developer on a specific renewables project and subscribe to a portion of the project's output by signing a Customer Development Agreement. The customer will receive a credit on their PG&E energy statement based on the output of their subscription to the project. Developers sign a power purchase agreement with PG&E which pays the developer for the unsubscribed energy. The program is available for the project applicant to use.

Ava Community Energy (Ava), a Community Choice Aggregator, is the default electricity provider for the City of Hayward. PG&E partners with Ava to deliver the electricity over PG&E's transmission and distribution system. Ava also participates in the IRP process (Ava 2022). Ava is on a path to provide 100% carbon-free electricity to all customers by 2030. Customers can choose from two different product choices: (1) Bright Choice, which offers a fixed percentage savings relative to PG&E's generation rates for an electricity mix containing a larger percentage of renewables than the baseline PG&E product; and (2) Renewable 100, which offers a 100% renewable electricity mix at a small fixed per-kWh premium relative to PG&E's generation rate.

Existing Conditions

California is a contributor to global GHG emissions. The total gross California GHG emissions in 2019 were 404.5 MMTCO_{2e} (CARB 2022a). The largest category of GHG emissions in California is transportation, followed by industrial activities and electricity

generation in state and out of state (CARB 2022a). In 2020, the total gross California GHG emissions were 369.2 MMTCO₂e (CARB 2022a).

In 2019, the total gross U.S. greenhouse gas emissions were 6,571.7 MMTCO₂e, or 5,841.2 MMTCO₂e after accounting for sequestration from the land sector (U.S. EPA 2022). While in 2020, total gross U.S. greenhouse gas emissions were 5,981.4 MMTCO₂e, or 5,222.4 MMTCO₂e after accounting for sequestration from the land sector (U.S. EPA 2022). The sharp decline of GHG emissions in 2020 compared to 2019 was largely due to the impacts of the coronavirus (COVID-19) pandemic on travel and economic activity (CARB 2022a, U.S. EPA 2022).

The city prepares an annual report to assess progress towards meeting the GHG emissions reduction targets established in the CAP. The city tracks changes in communitywide GHG emissions since 2005, which is the city's jurisdictional baseline year for the GHG emissions inventory. **Table 5.8-1** presents the city's 2023 GHG emissions inventory (Hayward 2025), which is the most recent GHG emissions inventory for Hayward.

TABLE 5.8-1 CITY OF HAYWARD 2021 GHG EMISSIONS INVENTORY	
Sector	Carbon dioxide equivalent emissions (MTCO₂e)
Electricity	26,011
Natural Gas	172,822
Transportation	353,271
Airport	4,779
Off-Road Vehicles	37,006
Solid Waste	32,537
Water & Wastewater	2,074
Total Emissions	628,500

Source: Hayward 2025.

As stated in their 2022 IRP (PG&E 2022b), PG&E has adopted a comprehensive and ambitious climate strategy and goals which includes meeting its climate strategy goal of 70 percent RPS by 2030. PG&E also plans on achieving net zero GHG emissions by 2040 and being climate positive by 2050. Carbon neutrality will be achieved through aggressive investments in GHG-free resources, including advanced load management as an alternative to traditional power generation.

PG&E seeks to meet its RPS milestones through the addition of new renewable resources. This is reflected in the Power Content Label through separate products for the residential and non-residential mix (PG&E 2022b). In the near-term, PG&E will procure 900 megawatts of long duration storage, baseload renewables and solar plus storage. PG&E also plans to incorporate 612 MW of demand response and 338 MW of energy efficiency and advance its demand response portfolio to 950 MW with a new

automated response technology program (PG&E 2022b, pg. 2). Similarly, Ava is on a path to provide 100% carbon-free electricity to all customers by 2030. Ava has contracted to build 1,125 MW of wind, solar, geothermal, and battery storage for its customers (Ava 2025). A comparison of PG&E's, Ava's, and the statewide power mix for 2023 is shown in **Table 5.8-2**. As with all load-serving entities in California, the carbon intensity factor will continue to change as the power mix gradually increases the use of renewable resources to achieve California's GHG and renewable energy goals.

TABLE 5.8-2 COMPARISON OF PG&E, AVA, AND STATEWIDE POWER MIX – 2023

Energy Resources	PG&E Base Plan Mix	PG&E 100% Solar Choice Mix	PG&E Green Saver Mix	Ava Bright Choice	Ava Renewable 100	2023 CA Power Mix
Eligible Renewable	32.8%	100.0%	100.0%	54.80%	100%	36.9%
Biomass & Biowaste	3.4%	0.0%	0.0%	13%	0%	2.1%
Geothermal	0.3%	0.0%	0.0%	2.20%	0%	4.8%
Eligible Hydroelectric	2.5%	0.0%	0.0%	2.50%	0%	1.8%
Solar	20.2%	100.0%	100.0%	5.60%	68.30%	17.0%
Wind	6.3%	0.0%	0.0%	31.60%	31.70%	11.2%
Coal	0.0%	0.0%	0.0%	0%	0%	1.8%
Large Hydroelectric	13.8%	0.0%	0.0%	34.10%	0%	11.7%
Natural Gas	0.0%	0.0%	0.0%	0%	0%	36.6%
Nuclear	53.4%	0.0%	0.0%	0%	0%	9.3%
Other	0.0%	0.0%	0.0%	0%	0%	0.1%
Unspecified Sources of Power	0.0%	0.0%	0.0%	11.1%	0%	3.7%
TOTAL	100%	100%	100%	100%	100%	100%

Sources: PG&E 2023, Ava 2025

5.8.2 Environmental Impacts

Methodology

The applicant estimated GHG emissions for demolition/construction from the demolition/construction equipment, vendor and hauling truck trips, and worker vehicle trips.

GHG emissions from the project operation are a result of diesel fuel combustion from the readiness testing and maintenance of the emergency backup generators, offsite vehicle trips for worker commutes and material deliveries, and facility upkeep (such as architectural coatings, consumer product use, landscaping, water use, waste generation, and electricity use).

Significance Criteria

California Environmental Quality Act (CEQA) Guidelines for GHG Emissions.

With the enactment of Senate Bill 97 (Dutton, Chapter 185, Statutes of 2007), the Governor's Office of Planning and Research was required by July 1, 2009, to prepare, develop, and transmit to the Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Those amendments to the CEQA guidelines became effective March 18, 2010, and were subsequently updated in December 2018 to further address the analysis of GHG emissions, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects. (See CEQA Guidelines, § 15064.4, subd. (a))
- The focus of the lead agency's analysis should be on the project's effect on climate change, rather than simply focusing on the quantity of emissions and how that quantity of emissions compares to statewide or global emissions. (See CEQA Guidelines, § 15064.4, subd. (b))
- The impacts analysis of GHG emissions is global in nature and thus should be considered in a broader context. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national, or global emissions. (See CEQA Guidelines, § 15064.4, subd. (b))
- Lead agencies should consider a timeframe for the analysis that is appropriate for the project. (See CEQA Guidelines, § 15064.4, subd. (b))
- A lead agency's analysis must reasonably reflect evolving scientific knowledge and state regulatory schemes. (See CEQA Guidelines, § 15064.4, subd. (b).)
- Lead agencies may rely on an adopted statewide, regional, or local plan in evaluating a project's GHG emissions. (See CEQA Guidelines, § 15064.4, subd. (b)(3))
- Lead agencies may analyze and mitigate the significant impact of GHG emissions as part of a larger plan for the reduction of greenhouse gases. (See CEQA Guidelines, §15183.5, sub. (a))
- A project's incremental contribution to a cumulative GHG emissions effect may be determined not to be significant and the effects of the project to not be cumulatively considerable if the project complies with the requirements of the GHG emissions reduction strategy. (See CEQA Guidelines, §§ 15064, sub. (h)(3); 15130, sub. (d); 15183, sub. (b))
- In determining the significance of a project's impacts, the lead agency may consider a project's consistency with the state's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is consistent with those plans, goals, or strategies. (See CEQA Guidelines, § 15064.4, subd. (b)(3))

- The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently account for the project's incremental contribution to climate change. (See CEQA Guidelines, § 15064.4, subd. (c).)

The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines include recommended thresholds of significance for determining whether projects would have significant adverse GHG impacts.

Construction/Demolition Emissions. For construction-related GHG emissions, the BAAQMD CEQA Guidelines do not identify a numerical GHG emissions threshold of significance, but instead recommend that those emissions should be quantified and disclosed using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the project. In addition, the BAAQMD CEQA Guidelines state that projects should incorporate best management practices (BMPs) to reduce GHG emissions during construction (BAAQMD 2023).

Direct Stationary Sources Emissions. For stationary sources, BAAQMD adopted a numeric threshold of significance of 10,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/yr) for projects that require permits from BAAQMD (BAAQMD 2023, Section 6.4).

Indirect and Non-Stationary Source Emissions. Other project-related emissions from mobile sources, area sources, energy use, and water use would not be included for comparison to the threshold of significance for stationary sources of GHG, based on guidance in the BAAQMD CEQA Guidelines (BAAQMD 2023, Section 6.4).

Instead, in April 2022, the BAAQMD adopted updated thresholds of significance with the publication of *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans* (BAAQMD 2022) to assist lead agencies when evaluating the indirect and "non-stationary" source emissions of land use development projects. Under the BAAQMD's 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project will not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds (BAAQMD 2023). In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2022, p.2).

The City of Hayward Climate Action Plan (Hayward 2024) is the latest update to the City of Hayward's (City) Climate Action Plan and is designed to meet the statewide GHG reduction targets for 2030 set by SB 32, and to achieve net carbon neutrality no later than 2045 by EO B-55-18 targets.

The 2024 CAP identifies existing city policies and regulations as well as new measures to be implemented by development projects in the areas of building energy, transportation, solid waste, water and wastewater, and carbon sequestration. Projects that comply with the policies and strategies outlined in the 2024 CAP and that are consistent with the General Plan land use designation on the project site would have a less than significant GHG impact (DayZen 2025).

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Less Than Significant Impact. Construction of the project would result in GHG emissions generated by the on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. The applicant estimated that these sources would generate a total of approximately 885 MTCO₂e during the estimated 22 months of construction, including demolition, excavation, trenching, site preparation, grading, landscaping and on-and-off-site construction (DayZenLLC 2023a, p. 146).

Because construction emissions would cease once construction is complete, these emissions are considered short term. The BAAQMD CEQA Guidelines do not identify a GHG emissions threshold for construction-related emissions. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the project. In addition, the BAAQMD CEQA Guidelines states that projects should incorporate BMPs to further reduce GHG emissions during construction. BMPs may include the use of alternative-fueled (for example, renewable diesel or electric) construction vehicles and equipment for at least 15 percent of the fleet, use of at least 20 percent of locally sourced or recycled building materials, and recycling or reusing at least 50 percent of construction waste (BAAQMD 2023, Table 6-1). The project would implement mitigation measure **AQ-1**, which would require, among other things, that the construction equipment be tuned and maintained in accordance with manufacturer's specifications and that construction equipment idling time be limited to five minutes to further reduce GHG emissions from fuel consumed from unnecessary idling or the operation of poorly maintained equipment. The project would also participate in the City's Construction and Demolition Waste Recycling Program by recycling or diverting asphalt and concrete and all other nonhazardous construction and demolition materials to the maximum extent practicable to reduce the amount of demolition and construction waste going to the landfill (DayZenLLC 2023a, p. 143 and Table 4.8-1). The quantity of construction-related GHG emissions would be limited to the construction phase, which would ensure GHG impacts are less than significant.

Operation

Less Than Significant with Mitigation Incorporated. GHG emissions from project operation and maintenance would consist of direct “stationary source” emissions from routine readiness testing and maintenance of the emergency backup generators and indirect and “non-stationary source” emissions from offsite vehicle trips for worker commutes and material deliveries, and facility upkeep, including architectural coatings, consumer product use, landscaping, water use, waste generation, and electricity use.

i. Direct Project Stationary Combustion Sources

The project would include 28 gensets: 26 powered by 2.75-MW Caterpillar D3516E engines, one powered by a 1-MW Caterpillar C32 engine, and one powered by a 175-kW Caterpillar D175 engine (DayZenLLC 2023a, DayZenLLC 2024m).

The applicant proposed to use renewable diesel as the primary fuel to the extent feasible with ultra-low sulfur diesel (<15 parts per million sulfur by weight) being used only as secondary backup fuel for the gensets (DayZenLLC 2023a, pg. 147). As discussed in more detail in **Section 5.6 Energy and Energy Resources**, the current supply for both renewable diesel and ultra-low sulfur diesel is more than sufficient to meet the project’s necessary demand. The available resource of renewable diesel would increase with more refineries coming online and more import supply. Staff expects that most likely the readiness testing and maintenance would be done with renewable diesel because such refueling can be scheduled. However, during emergency operations, the applicant might need to use ultra-low sulfur diesel in the event of supply challenges or disruption in obtaining renewable diesel (CEC 2022).

Table 5.8-3 shows the annual GHG emissions for the gensets routine readiness testing and maintenance. The emissions are conservatively estimated based on 50 hours of annual testing and maintenance at 100 percent load per engine.

TABLE 5.8-3 GREENHOUSE GAS EMISSIONS FROM GENSETS TESTING AND MAINTENANCE	
Source	Maximum Annual Emissions (MTCO₂e/yr)
Gensets – Testing and Maintenance (with ultra-low sulfur diesel)	2,848
Gensets – Testing and Maintenance (fuel-cycle GHG with renewable diesel)	906
BAAQMD Threshold for Stationary Sources of GHG	10,000
Exceeds Threshold?	No

Source: DayZenLLC 2023h.

GHG emissions from the project’s stationary sources (i.e. the emergency backup generators) for routine readiness testing and maintenance are well below the BAAQMD CEQA Guidelines GHG emissions significance bright-line threshold of 10,000 MTCO₂e/yr

for stationary sources and would not exceed the threshold level for inclusion in CARB's cap-and-trade program, which is 25,000 MTCO₂e/yr.

The project's likelihood of operating the emergency backup generators for unplanned circumstances or emergency purposes is low and, if such operation did occur, it would be infrequent and of short duration. As discussed in more detail in **Appendix B**, the analysis of BAAQMD's review of diesel engine use shows that the overall number of hours of operation for the facilities in the review that did run (which was less than half of them) was 0.07 percent of the available time over the 13-month period, which included the rare heat storm events in 2020 and is the only period for which data are available to staff. The average runtime for each event in BAAQMD's review was approximately 5.0 hours. Staff concludes the GHG emissions of the emergency backup generators during unplanned circumstances or emergency purposes would not add significantly to the GHG emissions estimated for readiness testing and maintenance. As discussed in more detail in **Appendix B**, the analysis of BAAQMD's review of diesel engine use shows that average engine ran no more than 36.5 hours over the 13-month period, which included the rare heat storm events in 2020. Staff expects diesel engine use during normal years would be much less than 36.5 hours. Thus, 50 hours of emergency backup generator operation per year is an appropriate estimate of operational time to accommodate both readiness testing and maintenance and emergency operation for any given year, even if ultra-low sulfur diesel is used during short emergency operation durations in the event of supply challenges or disruption in obtaining renewable diesel.

The applicant proposed a measure (**GHG-2**) which committed to use renewable diesel as primary fuel or ultra-low sulfur diesel as secondary fuel for the gensets. Staff agrees that this would be beneficial because the use of renewable diesel would reduce carbon dioxide emissions when compared with petroleum diesel. In **Table 5.8-3**, the applicant estimated the GHG emissions of about 2,848 MTCO₂e/yr from the proposed engines if ultra-low sulfur diesel is used. With a 68.18 percent reduction in GHG emissions using renewable diesel in place of ultra-low sulfur diesel (CEC 2023), staff calculated the fuel-cycle GHG emissions of the proposed engines to be 906 MTCO₂e/yr. Staff proposes mitigation measure **GHG-2** to require the applicant to use renewable diesel for 100 percent of total energy use by the emergency backup generators, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The project owner would document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project applicant shall provide such documentation to the City of Hayward Director of Development Services. The project owner shall perform any source test of the emergency backup generators using renewable diesel if required by the BAAQMD.

With the implementation of mitigation measure **GHG-2**, the GHG emissions from the project's stationary sources would be less than the BAAQMD significance threshold of 10,000 MTCO₂e/yr and impacts would be less than significant. In addition, as discussed below, with the implementation of mitigation measure **GHG-2**, the project's stationary

sources would not conflict with plans, policies, or regulations adopted to achieve long-term GHG emissions reduction goals.

ii. Indirect and Non-Stationary Sources Emissions

Maximum GHG emissions from indirect and non-stationary sources (i.e., energy use, mobile sources and building operation) are provided in **Table 5.8-4**.

Project Electricity Usage. The project would include Project Design Measure **GHG-1** in which the project owner shall participate in PG&E's Regional Renewable Choice program (i.e., 100% carbon-free electricity), or Ava Community Energy's Renewable 100 program, or a clean energy program supplying 100% carbon-free electricity. Therefore, there would be no GHG emissions from electricity usage during normal operation. **Table 5.8-4** shows the GHG emissions associated with energy and fuel use for facility electrical generation during maintenance and readiness testing of the emergency diesel generators. The primary function of the project is to house computer servers, which require electricity and cooling 24 hours a day to operate. Annual GHG emissions associated with electricity usage supplied by a utility are the product of the maximum estimated annual electricity usage and the utility-specific carbon intensity factor, which depends on the utility's portfolio of power generation sources. The projected maximum demand for the project is 67.2 MW. After full build-out, staff conservatively estimates that the worst-case energy use from the project's activities would be up to 588,672 MWh/year ($= 67.2 \text{ MW} \times 8,760 \text{ hours/year}$). With the carbon intensity of 160 lbs CO₂/MWh for 2020 based on Pacific Gas & Electric's (PG&E) Climate Strategy Report (PG&E 2022a, pg. 12) and CalEEMod default methane (CH₄) and nitrous oxide (N₂O) intensity factors (0.033 lbs/MWh and 0.004 lbs/MWh, respectively), the maximum avoided indirect GHG emissions from electricity consumption with the incorporation of **GHG-1** would be up to 42,723 MTCO₂e/yr⁵.

Electricity for the project would be provided by Ava, or PG&E if the applicant opts out of Ava, both of which are on track to meet their 2030 GHG emissions reductions target. Ava and PG&E are subject to CARB's cap-and-trade program requirements and the Renewables Portfolio Standard (RPS) requirements. As with all load-serving entities in California, the carbon intensity factor would continue to change as the power mix gradually increases the use of renewable resources to achieve California's GHG and renewable energy goals.

The project would avoid indirect GHG emissions from electricity usage by contracting with PG&E or Ava for a supply of 100 percent carbon-free electricity (mitigation measure **GHG-1**) (DayZenLLC 2023a, pg. 147). Staff concludes that without this mitigation the project could result in a significant, adverse impact as a result of its indirect GHG emissions. Therefore, staff proposes mitigation measure **GHG-1** to require

⁵ Annual electricity use: $67.2 \text{ MW} \times 8,760 \text{ hours/year} = 588,672 \text{ MWh/year}$.

Carbon intensity of CO₂e: 160 lbs CO₂/MWh.

Avoided GHG emission due to **GHG-1** = $160 \text{ lbs CO}_2/\text{MWh} \times 588,672 \text{ MWh/year} = 42,723 \text{ MT CO}_2\text{e/year}$

the applicant to participate in PG&E's Regional Renewable Choice program, or Ava Community Energy's Renewable 100 program, or participate in a clean energy program that accomplishes the same goal of 100 percent carbon-free electricity. With implementation of mitigation measure **GHG-1**, potential impacts associated with electricity use would be reduced to less than significant.

Project Mobile Emissions Sources. Table 5.8-4 shows the applicant's estimated annual GHG emissions from mobile emissions sources. Trip rates for land use types are default values obtained from CalEEMod, and the project land uses would generate approximately 54 trips per day during operations (DayZenLLC 2023c, p. 30 and Table AQ4-2). The emissions estimate did not account for the net change in trips at the site associated with the existing land use. However, the applicant conservatively estimated the GHG emissions based on approximately 54 trips per day for the project.

Project Water Consumption and Waste Generation. Table 5.8-4 shows the estimated annual GHG emissions from water consumption and waste generation. Water consumption results in indirect emissions from electricity usage for water conveyance and wastewater treatment. Daily operations at the project would also generate solid waste, which results in fugitive GHG emissions during waste decomposition at the landfill.

Refrigerant Use. The project would use refrigerants in the cooling equipment at the SVY03A Campus (DayZen 2025). The refrigerant used in the air conditioner splits, mini-splits, and rooftop units (RTU) proposed would be R-454b. The applicant estimates a 2.0 percent annual refrigerant loss a year. The total refrigerant charge for the cooling equipment at the SVY03A Campus is 2,591.3 lbs of R-454b. The applicant estimated a total of 51.83 lbs of refrigerant would be lost in a year for all of the air conditioners at the project. Since R-454b has a GWP of 465.39, the project would create about 10.96 MTCO₂e into the atmosphere annually due to refrigerant loss (DayZen 2025, p. 7).

Gas Insulated Equipment Leakage. SF₆ would not be used in the proposed breakers. There are two alternatives under consideration. The alternative would not be selected until the design of SVY03 Campus progresses. One alternative uses N₂ and O₂ and would not have any GHG leakage emissions. The other alternative is the gas mixture C4-FN with a GWP of 2,750. The system capacity for this alternative would be 500 kg with an assumed leak rate of 0.3%. The estimated GHG emissions would be 0.89 tons CO₂e per year (DayZenLLC 2024h, pp. 2-3), which is equivalent to 0.81 MTCO₂e/yr as shown in Table 5.8-4.

TABLE 5.8-4 MAXIMUM GHG EMISSIONS FROM ENERGY USE, MOBILE SOURCES, AND BUILDING OPERATION DURING PROJECT OPERATION

Source	Annual Emissions (MTCO ₂ e/yr)
Energy and Fuel Use for Facility Electricity ^a	0
Mobile Sources ^b	40.15
Area Sources ^c	0
Water Use ^d	1

TABLE 5.8-4 MAXIMUM GHG EMISSIONS FROM ENERGY USE, MOBILE SOURCES, AND BUILDING OPERATION DURING PROJECT OPERATION

Source	Annual Emissions (MTCO ₂ e/yr)
Waste Generation ^e	0.1
Cooling System R-454b Leakage ^f	10.96
GIE Leakage ^g	0.81
Total	53.0

Sources: DayZenLLC 2023c, DayZenLLC 2024h, DayZen 2025, CEC staff analysis.

Notes:

^a Since the project would not use natural gas appliances and would use 100 percent carbon-free electricity, the annual GHG emissions associated with energy and fuel use for facility electricity would be zero. As discussed in more detail in the text, the maximum avoided indirect GHG emissions from electricity consumption with the use of 100 percent carbon-free electricity would be up to 42,723 MTCO₂e/yr.

^b Trip rates for land use types are default values obtained from CalEEMod.

^c Operational emissions estimated using CalEEMod.

^d Annual GHG emissions associated with water usage were estimated using CalEEMod.

^e Annual GHG emissions associated with solid waste generation estimated using CalEEMod.

^f The applicant estimated GHG emissions from refrigerant leakage based on the leakage rate of 2.0 percent per year and a GWP of 465.39 for R-454b.

^g The project will not use SF₆. One alternative would not have GHG emissions while the other would have a GWP of 2,750 with an annual leakage of 0.3 percent per year. The applicant's estimated GHG emissions with the latter alternative is included as a worst case.

Summary of Indirect and Non-stationary GHG Emissions. As shown in **Table 5.8-4**, operation of the project is estimated to generate 53.0 MTCO₂e/yr from energy and fuel use for facility electricity use and other non-stationary sources. However, this does not include efficiency measures that would be pursued as part of the project, nor does it reflect implementation of state and local measures to reduce GHG emissions associated with electricity production and California's fuels. For example, programs to implement SB 350 and SB 100 would continue to promote renewable resources in the power mix and ensure the ongoing substantial reductions in GHG emissions from electricity generation. In addition, with the implementation of mitigation measure **GHG-1**, the project would use 100 percent carbon-free electricity by participating in PG&E's Regional Renewable Choice, or Ava Community Energy's Renewable 100 program, or participating in other clean energy programs that accomplishes the same goal of 100 percent carbon-free electricity. Therefore, with the implementation of mitigation measure **GHG-1**, the GHG impacts from the project's electricity use would be less than significant.

Conclusion

Less Than Significant with Mitigation Incorporated. The mitigation elements contained in **GHG-1** and **GHG-2** ensure the total emission profile of the project remains less than significant.

Based on the total GHG emissions from **Table 5.8-4** and 45 employees, the project's GHG emissions per employee is 1.18 which complies with the city's efficiency threshold of 2.62 MTCO₂e per employee.

With the use of 100 percent renewable diesel, the project's stationary source GHG emissions from readiness testing and maintenance of the gensets would be reduced to the extent feasible, and stationary source emissions would be below the BAAQMD CEQA Guidelines threshold of significance of 10,000 MTCO₂e/yr.

Staff proposes mitigation measure **GHG-2** which ensures the applicant would use renewable diesel for 100 percent of total energy use by the gensets to the extent feasible, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The project owner would document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project applicant shall provide such documentation to the City of Hayward Director of Development Services. With this measure, the project's direct GHG emissions from stationary sources would not have a significant direct or indirect impact on the environment. With **GHG-2**, the operation of the gensets would not hinder California's efforts to achieve the statewide 2045 GHG emissions reduction goal.

As discussed below, with the implementation of mitigation measure **GHG-1** and other proposed design measures, the GHG emissions from the project's energy usage, mobile sources, and building operation would occur in a manner consistent with the City's CAP and the policies reflected in Executive Order B-55-18, CARB's scoping plan, and later programs to implement SB 350 and SB 100 to achieve the statewide 2030 and other future GHG emissions reduction targets. These categories of GHG emissions would not result in a "cumulatively considerable" contribution under CEQA because they would conform with all applicable plans, policies, and regulations adopted for the purpose of GHG emissions reductions, as discussed further in "b" below. In addition, under the BAAQMD's 2022 CEQA thresholds of significance for land use projects "option A", GHG impacts from indirect and non-stationary emissions sources of the project would be considered to have a less-than-significant impact since the project is consistent with the building and transportation requirements under option A.

The project's buildings would be constructed in accordance with the 2022 California Green Building Standards Code and would include green building measures to reduce energy consumption. The buildings would be all-electric using 100 percent carbon-free electricity. In addition, renewable diesel would be used to fuel emergency backup diesel generators with the use of ULSD as a backup fuel. The gensets would operate only during routine testing and maintenance (limited to 50 hours per genset) to ensure reliability and data security requirements, and in the rare case of emergencies to serve the project and not the wider electric grid. All of these measures would contribute to the state meeting the goal of carbon neutrality by 2045. Thus, the proposed project's consumption of energy resources during operation would not be wasteful, inefficient, or

unnecessary. Therefore, the maximum potential rate of GHG emissions from the project's energy usage, mobile sources, and building operation are determined to have less-than-significant GHG impacts.

The majority of the project's operational GHG emissions would occur during the readiness testing and maintenance of the gensets. The project's likelihood of operating for unplanned circumstances or emergency purposes is low and if such operation did occur it would be infrequent and of short duration. Staff concludes that 50 hours of operation per year per engine reasonably accommodates both readiness testing and maintenance and emergency operation for any given year. Staff, therefore, concludes that GHG emissions during emergency operation would be less than significant with mitigation incorporated

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction

Less Than Significant Impact. The project's short-term demolition and construction GHG emissions would not interfere with the state's ability to achieve long-term GHG emissions reduction goals. As mentioned above, the project would implement BMPs, as specified in mitigation measure **AQ-1**, that would further reduce construction-related GHG emissions. The project would also participate in the City's Construction and Demolition Debris Recycling Program to further reduce GHG emissions. In addition, the city could also make the use of alternative fuels a condition of approval to further reduce GHG emissions for new developments during pre-construction review meetings. The vehicles and fuel supplies used during demolition and construction of the project are required to comply with the applicable GHG reduction programs for mobile sources and suppliers of transportation fuels. The project would conform to relevant programs and recommended actions detailed in CARB's scoping plan. Similarly, the project components would not conflict with regulations adopted to achieve the goals of CARB's scoping plan. The project would be consistent with General Plan Energy Policies NR-4.1 (promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment), NR-4.2 (encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the lifecycle of a structure), NR-4.6 (encourage and support the generation, transmission, use, and storage of locally-distributed renewable energy in order to promote energy independence, efficiency, and sustainability) and NR-4.11 (require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020) (DayZenLLC 2023a, Table 4.8-1). The project would also comply with policy PFS-7.12 (City's Construction and Demolition Waste Recycling Program) and

state waste diversion requirements to reduce the amount of waste in landfills (DayZenLLC 2023a, Table 4.8-1).

Operation and Maintenance

Less Than Significant with Mitigation Incorporated. The project's GHG emissions related to operation and maintenance would be caused by the combustion of diesel fuel in the emergency backup generator engines and other routine operational activities (including mobile sources and building operation).

i. Direct Project Stationary Combustion Sources

The direct project stationary combustion sources are the emergency backup generator engines.

State Plans, Policies, and Regulations

As discussed under **Regulatory Background** above, California has set ambitious 2030, 2045, and 2050 GHG emissions reduction goals. Because of these goals, staff concludes that the identified methods of carbon reduction contained in mitigation measures **GHG-1** and **GHG-2** would be necessary to ensure the project's GHG emissions are less than significant.

SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045. While the project is not directly required to comply with the SB 100 provisions, it is technically a generator of electricity and, therefore, it is reasonable to apply the GHG emissions reduction goal to the project. Mitigation measure **GHG-2** would ensure the applicant uses renewable diesel for 100 percent of total energy use by the gensets to the extent feasible, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The project owner would document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project applicant shall provide such documentation to the City of Hayward Director of Development Services. The mitigation would also require annually reporting the status of procuring and using renewable diesel. With implementation of mitigation measure **GHG-2**, the project's stationary sources would use renewable diesel to ensure that the operation of the gensets would not hinder California's efforts to achieve the statewide 2045 GHG emissions reduction goal.

Regional Plans, Policies, and Regulations

Bay Area 2017 Clean Air Plan. With **GHG-2**, the direct project stationary combustion sources (i.e. emergency backup generator engines) would also be consistent with BAAQMD's Bay Area 2017 Clean Air Plan measure to Decarbonize Electricity Generation (EN1).

Diesel Free by '33. In 2018, a representative from the Alameda County Board of Supervisors personally became a signatory to the BAAQMD's Diesel Free by '33 initiative. However, the CEC has concluded that Diesel Free by '33 is not an applicable GHG emissions reduction strategy, program, or law that facilities must comply with. Nevertheless, it is a regional goal to reduce petroleum-based diesel fuel emissions in communities.

Renewable diesel is currently used mostly as a transportation fuel. There are both federal (CEC 2020a) and state incentives that offset the increased cost of renewable diesel compared to petroleum-based diesel when used in transportation applications. However, staff is unaware of any incentives that would apply to stationary sources, including the project. Staff proposes mitigation measure **GHG-2** to require the applicant to use renewable diesel for 100 percent of total energy use by the gensets, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel.

Local Plans, Policies, and Regulations

City of Hayward General Plan. In July 2014, the City Council adopted the Hayward 2040 General Plan which incorporated the CAP. The General Plan contains policies and implementation programs that serve as actions to reduce greenhouse gas emissions. The overall objectives of these policies and implementation programs are to reduce Hayward's greenhouse gas emissions by 20 percent below 2005 baseline levels by 2020, 62.7 percent below 2005 baseline levels by 2040, and 82.5 percent below 2005 baseline levels by 2050. One of the goals of the general plan is to improve the health and sustainability of the community through continued local efforts to improve regional air quality, reduce greenhouse gas emissions, and reduce community exposure to health risks associated with toxic air contaminants and fine particulate matter. To achieve this goal the project proposes to use renewable diesel-fueled (**GHG-2**) emergency backup generators with advanced air pollution controls and use 100% carbon-free electricity (**GHG-1**).

2024 CAP Update. The 2024 CAP Update includes requirement for new development to adopt transportation demand management strategies, adopt an all-electric requirement for new non-residential construction, and develop and adopt an Urban Forest Management Plan. Hayward has adopted the following targets using the 2005 GHG inventory as the baseline:

- Reduce GHG emissions by 20 percent below 2005 levels by 2020 (equivalent to 1990 GHG emissions)
- Reduce GHG emissions by 30 percent below 2005 levels by 2025
- Reduce GHG emissions by 55 percent below 2005 levels by 2030 (equivalent to 40 percent below 1990 GHG emissions)¹

- Work with the community to develop a plan that may result in the reduction of community-based GHG emissions to achieve carbon neutrality by 2045.

The proposed design measures undertaken by the project would be consistent with these targets. In addition, as discussed above, the project's GHG emissions per employee would comply with the city's efficiency threshold of 2.62 MTCO₂e per employee.

ii. Indirect and Non-Stationary Sources Emissions

The project's indirect and non-stationary sources emissions include those from energy use, mobile sources and building operation.

State Plans, Policies, and Regulations

The project's GHG emissions are predominantly from energy and fuel use for facility electrical generation. Multiple measures contained in CARB's scoping plan address GHG emissions from energy use. For example, CARB's cap-and-trade program, through the regulation of upstream electricity producers, would account for GHG emissions in the project's power mix and requires these emissions to be reduced by the amount needed to achieve the statewide 2030 GHG emissions reduction goal. Electricity sources and suppliers used by the project must comply with the RPS and cap-and-trade program requirements. This, however, is not to say that new large consumers of electricity should not also be responsible for the GHG emissions resulting from their electricity use.

While PG&E itself is compliant with SB 100, staff concludes that because the project would present such a large, single potential increase in load (up to 67.2 MW at full build out), it is not sufficient to point to PG&E's compliance to conclude the project's indirect emissions from electricity use are less than significant. The more electricity demand added to the grid, the harder it becomes to meet long-term GHG emissions reduction goals. Transmission resources are not infinite, and renewable imports are increasingly being taken as other states establish their own GHG emissions reduction goals. Adding renewable generation, while obviously preferable to fossil-fueled generation, is not without its own potential environmental impacts, and asking all customers of a load serving entity to share in the costs of greening additional demand brought on by large commercial customers raises equity concerns. Without a requirement that these data center facilities bear responsibility for ensuring that their electricity use would not impede the attainment of the state's GHG emissions reduction goals, including SB 100, it is unclear how the state is going to make the increasingly steep reductions needed to avert the most catastrophic climate change scenarios. The applicant proposes to participate in PG&E's Regional Renewable Choice or Ava Community Energy's Renewable 100 program (i.e., 100 percent carbon-free electricity) or participate in a clean energy program that accomplishes the same goal of 100 percent carbon-free electricity. Therefore, to conclude the project would not impede the attainment of the state's GHG emissions reduction goals, staff recommends the implementation of mitigation measure **GHG-1**, which requires the project applicant to participate in

PG&E's Regional Renewable Choice program, or Ava Community Energy's Renewable 100 program, or other renewable energy program that accomplishes the same goal of 100 percent carbon-free electricity.

Other project activities, such as mobile sources and building operation, would be similar to those of other commercial or industrial projects subject to development review by the City. The project would comply with all applicable city and state green building standards measures, including California Code of Regulations, Title 24, Part 6, baseline standard requirements for energy efficiency and the California Green Building Standards Code, commonly referred to as CALGreen (California Code of Regulations, Title 24, Part 11).

The applicant would use a low GWP refrigerant, R-454b, in various pieces of cooling equipment (DayZen 2025). The use of the proposed low GWP refrigerant would be allowed under the HFC prohibition regulation and the HFC sale and distribution prohibition (SB 1206).

With implementation of mitigation measure **GHG-1**, the operation of the project would not conflict with regulations adopted to achieve the goals of the scoping plan. Accordingly, the project's operational activities would not interfere with the state's ability to achieve long-term GHG emissions reduction goals.

Regional Plans, Policies, and Regulations

Bay Area 2017 Clean Air Plan. BAAQMD's Bay Area 2017 Clean Air Plan (BAAQMD 2017) includes Energy and Climate Measure (ECM)-1 – Energy Efficiency, and due to the relatively high project electrical demand, energy efficiency measures are included in the design and operation of the onsite electrical and mechanical systems, consistent with this measure. Mitigation measure **GHG-1** requires the project applicant to participate in PG&E's Regional Renewable Choice program, or Ava Community Energy's Renewable 100 program, or other clean energy program accomplishes the same goal of 100 percent carbon-free electricity. These features would be consistent with BAAQMD's Bay Area 2017 Clean Air Plan measure to Decarbonize Electricity Generation (EN1).

BAAQMD CEQA Thresholds of Significance. Under the BAAQMD's 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project would not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds (BAAQMD 2022, p.2). In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2022, pg. 2).

The proposed project would meet the new BAAQMD GHG Land Use Project standards by not including natural gas infrastructure, not using energy in a wasteful, inefficient, or

unnecessary manner, meeting locally adopted Senate Bill 743 VMT target, complying with CALGreen Tier 2 off-street electric vehicle requirements (as required by **MM GHG-3**), and therefore, complying with Item A of the standards. (DayZenLLC 2023a, p. 146). Discussions of the project's consistency with BAAQMD thresholds for land use projects are provided below in **Table 5.8-5**.

TABLE 5.8-5 CONSISTENCY WITH BAAQMD THRESHOLDS FOR LAND USE PROJECTS	
BAAQMD Threshold Project Consistency	BAAQMD Threshold Project Consistency
Buildings	
a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).	Consistent. The project would not include natural gas appliances or natural gas plumbing.
b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.	Consistent. As described in further detail in Section 5.6 Energy and Energy Resources , the project would not result in any wasteful, inefficient, or unnecessary energy usage. The project would include all-electric buildings built to CalGreen standards with emergency diesel generators fueled by renewable diesel and only operated on a limited basis for maintenance, testing and emergency operation as required to ensure reliability and data security requirements.
Transportation	
a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT	Consistent. Section 5.17 Transportation shows that the Project VMT being 15 percent or more lower than the City Average VMT per employee, which indicates that the Project is expected to have a less than significant impact.
b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.	Consistent. The applicant is working with the City to include the necessary electric vehicle parking spaces to comply with the CALGreen Tier 2 off-street electric vehicle requirements and City of Hayward EV Charging Reach Code. MM GHG-3 would ensure compliance with the requirements.

Source: DayZenLLC 2023a, Page 146

Plan Bay Area 2040/SB 375. JMTTC and ABAG developed an SCS with the adopted Plan Bay Area 2040 to achieve the Bay Area's regional GHG emissions reduction target. Plan Bay Area 2040 sets a 15 percent GHG emissions reduction per capita target from passenger vehicles by 2035 when compared to the project 2005 emissions. However,

these emission reduction targets are intended for land use and transportation strategies only. **Section 5.17 Transportation** shows that the Project VMT would be 15 percent or more below the City average VMT per employee, which indicates that the project would have a less-than-significant impact on VMT. In addition, the project would reduce employment on site from approximately 175 employees to 45 employees, therefore reducing trip volume.

Local Plans, Policies, and Regulations

City of Hayward 2040 General Plan. The Hayward 2040 General Plan establishes a community-based vision for the future of Hayward, and establishes goals, policies and implementation programs to help the City and greater Hayward community achieve that vision. The General Plan is the City's overarching planning document and provides a blueprint for growth and development by setting land use policy citywide. As part of the City's General Plan Update in 2014, the Climate Action Plan (CAP), which was adopted in 2009, was incorporated into the 2040 General Plan. The purpose of the CAP is to reduce GHG emissions within the City. In addition, the City updated the CAP on January 31, 2024. With the inclusion of the CAP, the General Plan includes goals and policies to address sustainability aimed at reducing the city's contribution to GHG emissions. For the project, the implementation of policies that increase energy efficiency or reduce energy use would effectively reduce indirect GHG emissions associated with energy consumption. The consistency of the project with the applicable land use, mobility, natural resources, public facilities, community health and quality of life in the 2040 General Plan is analyzed in **Table 5.8-6** below. As shown, the project would be consistent with the applicable sustainability policies in the General Plan.

TABLE 5.8-6 PROJECT CONSISTENCY WITH GENERAL PLAN SUSTAINABILITY POLICIES RELATED TO INDIRECT AND NON-STATIONARY SOURCES EMISSIONS

Emission Reduction Policies	Project Consistency
<i>Air Quality Policies</i>	
NR-2.4 Community Greenhouse Gas Reduction. The City shall work with the community to reduce community-based GHG emissions by 20 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.	The project would include all project design elements required as part of the BAAQMD threshold of significance for greenhouse gas emissions under option A for land use projects. Therefore, the project would be aligned with the state's goal of achieving carbon neutrality by 2045.
NR-2.6 Greenhouse Gas Reduction in New Development. The City shall reduce potential greenhouse gas emissions by discouraging new development that is primarily dependent on the private automobile; promoting infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; and improving the regional jobs/housing balance ratio.	The project would be constructed to CALGreen standards and would be located within an area of the City with low VMT per employee. For these reasons, the project would be consistent with this measure.

TABLE 5.8-6 PROJECT CONSISTENCY WITH GENERAL PLAN SUSTAINABILITY POLICIES RELATED TO INDIRECT AND NON-STATIONARY SOURCES EMISSIONS

Emission Reduction Policies	Project Consistency
<i>Energy Policies</i>	
HQL-9.6 Energy Resiliency. The City shall continue to encourage residents and businesses to use less gasoline for transportation, and improve energy efficiency in and renewable energy generation from buildings and industry processes to reduce impacts from rising oil and energy prices.	With the implementation of MM GHG-3 , the project would comply with the CALGreen Tier 2 off-street electric vehicle requirements and City of Hayward EV Charging Reach Code to reduce gasoline use for transportation. Therefore, the project would be consistent with this measure.
NR-4.1 Energy Efficiency Measures. The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.	The proposed buildings would be all electric. Under emergency situations, the electricity would be supplied by backup diesel generators. The buildings would be designed to meet CALGreen requirements for energy efficiency, include EV charging infrastructure, and utilize recycled or responsibly sourced building materials. The project would divert construction waste to the maximum extent practicable. The proposed project would comply with City and state waste construction waste diversion requirements and utilize recycled or responsibly sourced building materials.
NR-4.2 Efficient Construction and Development Practices. The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources through the life-cycle of a structure.	
NR-4.11 Green Building Standards. The City shall require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020.	
<p>LU-1.8 Green Building and Landscaping Requirements. The City shall maintain and implement green building and landscaping requirements for private- and public-sector developments to:</p> <ul style="list-style-type: none"> • Reduce the use of energy, water, and natural resources • Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties • Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors • Encourage the use of durable, sustainably-sourced, and/or recycled building materials • Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste 	<p>The project would utilize lighting control to reduce energy usage for new exterior lighting and air economization for building cooling. Water efficient landscaping and ultra-low flow plumbing fixtures in the building would be installed to limit water consumption.</p> <p>With implementation of mitigation measure GHG-1, the project owner will participate in the PG&E's Regional Renewable Choice program or Ava Community Energy's Renewable 100 program for 100 percent carbon-free electricity, or participate in a clean energy program that accomplishes the same goal of 100 percent carbon-free electricity associated with the project. Besides, with implementation of mitigation measure GHG-2, the applicant would use renewable diesel for 100 percent of total energy use by the gensets, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. As a result, onsite renewable energy generation is not needed to offset the project's emissions.</p>

TABLE 5.8-6 PROJECT CONSISTENCY WITH GENERAL PLAN SUSTAINABILITY POLICIES RELATED TO INDIRECT AND NON-STATIONARY SOURCES EMISSIONS

Emission Reduction Policies	Project Consistency
PFS-7.12 Construction and Demolition Waste Recycling: The City shall require demolition, remodeling and major new development projects to salvage or recycle asphalt and concrete and all other nonhazardous construction and demolition materials to the maximum extent practicable.	The project would comply with City and state waste construction waste diversion requirements and utilize recycled or responsibly sourced building materials. Therefore, the project is consistent with this measure.
<i>Water Use Policies</i>	
PFS-3.17 Bay-Friendly Landscaping: The City shall promote landscaping techniques that use native and climate appropriate plants, sustainable design and maintenance, water efficient irrigation systems, and yard clipping reduction practices.	The project would plant 47 trees and water efficient landscaping plants and shrubs throughout the site to reduce heat island effect.
NR-6.9 Water Conservation. The City shall require water customers to actively conserve water year-round, and especially during drought years.	The project would be designed to meet CALGreen requirements for building efficiency including use of water efficient plumbing fixtures and would utilize water efficient landscaping plants and irrigation systems to reduce water demand on-site.

Source: DayZenLLC 2023a, Table 4.8-1, pg. 147.

City of Hayward Climate Action Plan. Discussion of the project's conformance with the applicable reduction measures for new development in 2024 CAP Update are provided below in **Table 5.8-7**:

TABLE 5.8-7 SUMMARY OF APPLICABLE 2024 CLIMATE ACTION PLAN MEASURES AND PROJECT CONSISTENCY

Applicable CAP Measure	Requirements	Project Compliance
Land Use		
<i>Green Building Standards</i>		
Hayward CAP (Measures BE-1 & BE-2)	1. All Project Types - Green Building Policy. Will the Project/Plan include construction and operational commitment to comply with the latest version of CALGreen Code and any applicable City Reach Codes (such as Ordinance 22-11) for building decarbonization and water and energy efficiency?	Yes. The project will comply with CalGreen requirements for waste reduction and energy efficiency and would use 100% carbon free electricity during normal non-emergency operation.
Energy		
<i>Building Decarbonization</i>		

TABLE 5.8-7 SUMMARY OF APPLICABLE 2024 CLIMATE ACTION PLAN MEASURES AND PROJECT CONSISTENCY

Applicable CAP Measure	Requirements	Project Compliance
Hayward CAP (Measures BE-1, BE-2, & BE-3)	2. All Project Types – Building Decarbonization. Will the Project/Plan include decarbonized new construction and/or applicable remodels (based on Hayward Municipal Code Chapter 10 Article 22), including for lighting, heating, cooking, and water heating?	Yes. The project would include all electric building construction and per GHG-1 , the project would achieve 100% carbon free electricity during normal non-emergency operation.
<i>Energy Efficiency</i>		
Hayward CAP (Measures BE-1, BE-2, BE-3, & BE-5)	3. All Remodels - Energy Efficiency Upgrades. Will the Project/Plan include energy efficiency upgrades via installation of energy-efficient window upgrades, appliances, LED lighting, etc.? As an option, would the project participate in residential and commercial energy efficiency programs (such as BayREN Home+ program and efficient appliance rebates)?	Yes. The project would utilize lighting control to reduce energy usage for new exterior lighting and air economization for building cooling.
Hayward CAP (Measure BE-3)	4. Non-Residential and Multi-Family Residential Projects - Energy Benchmarking. Will the Project/Plan (if over 50,000 sf) use the ENERGY STAR Portfolio Manager benchmarking tool to audit and disclose energy use?	Yes.
Hayward CAP-Communitywide GHG Thresholds	5. Residential (existing & new): 1.99 MTCO _{2e} per resident Non-Residential (existing & new): 2.62 MTCO _{2e} per employee Mixed-Use (existing & new): 2.18 MTCO _{2e} per service person	Yes. The project meets the Non-Residential requirements.
<i>Renewable Energy</i>		
Hayward CAP (Measure BE-4)	6. All Project Types - Participation in Community Choice Aggregation. Will the Project/Plan retain Ava Community Energy as the energy provider and encourage occupants to not opt out from the 100% renewable energy option?	Yes. Per GHG-1 , the project will participate in PG&E's Renewable Choice program, or Ava Community Energy's Renewable 100 program, or participate in a clean energy program that accomplishes the same goal of 100% carbon-free electricity.
Hayward CAP (Measure BE-6)	7. All Project Types - Battery Storage and Solar. As an option, will the Project/Plan include installation of a solar PV system and battery storage at time of new construction and remodels/retrofits?	No. The project does not include installation of a solar PV system/battery storage, but would use 100% carbon-free electricity except during emergency conditions where diesel generators would be used.
Transportation		
<i>Alternative and Shared Transportation</i>		

TABLE 5.8-7 SUMMARY OF APPLICABLE 2024 CLIMATE ACTION PLAN MEASURES AND PROJECT CONSISTENCY

Applicable CAP Measure	Requirements	Project Compliance
Hayward CAP (Measures T-1, T-2, & T-3)	8. All Project Types - Transportation Demand Management (TDM) and Smart Growth. Will the Project/Plan implement TDM measures and smart growth principles, such as parking preferences or incentives for residents and employees who rideshare or use low- or zero-emission vehicles, implementing mixed-use development, implementing parking demand management, and providing improvements to the pedestrian and bicycle environment within the project site or plan area, to incentivize walking, biking, and public transit use? As an option, will the project be GreenTRIP certified?	Yes. The project would reduce employment on site from approximately 175 employees to 45 employees, therefore reducing trip volume. Additionally, the project would construct sidewalks along the project frontages that currently do not include sidewalks, thereby improving the pedestrian network.
Hayward CAP (Measure T-2)	9. Commercial or Industrial Projects - TDM Plan. Will the Project/Plan (if involving 50 or more employees) develop a TDM Plan including money-based incentives for employees to bike, walk, carpool or take public transit to work, to encourage alternative modes of transportation?	N/A. The project involves less than 50 employees.
Active Transportation		
Hayward CAP (Measure T-1)	10. All Project Types - Walkable/Bikeable Street Landscape. Will the Project/Plan design the urban landscape to make walking and biking more desirable, including via provision of features such as bike lanes, bike parking, traffic calming, pedestrian crosswalks, and beautification consistent with the Bicycle and Pedestrian Master Plan, Local Road Safety Plan, and/or Multi-Modal Intersection Improvement Plan (as applicable).?	Yes. The project would construct sidewalks along the site frontages that currently do not include sidewalks, thereby improving the pedestrian network. The project will also reduce vehicle trips compared to existing conditions.
Hayward CAP (Measure T-1)	11. All Project Types - Complete Streets Program. Will the Project/Plan provide infrastructure connections to bike/pedestrian networks or public transit and/or make improvements to bike/pedestrian networks identified in the Bicycle and Pedestrian Master Plan (as applicable) in order to implement multimodal travel elements?	Yes. The project would construct sidewalks along the site frontages that currently do not include sidewalks, thereby improving the pedestrian network.
Hayward CAP (Measure T-1)	12. All Project Types - Bicycle Parking. Will the Project/Plan comply with the Hayward Municipal Code or CALGreen requirements, whichever is greater, for provision of bicycle parking?	Yes. The project would include 10 bicycle parking spaces.

TABLE 5.8-7 SUMMARY OF APPLICABLE 2024 CLIMATE ACTION PLAN MEASURES AND PROJECT CONSISTENCY

Applicable CAP Measure	Requirements	Project Compliance
<i>Vehicle and Off-road Equipment Electrification</i>		
Hayward CAP (Measure T-4)	13. All Project Types - EV Charger Reach Code. Will the Project/Plan comply with the most recent Hayward EV Charging Reach Code (Hayward Municipal Code Section 10-2.800) requirements for provision of parking spaces and infrastructure designed to accommodate electric vehicles?	Yes. With the implementation of MM GHG-3 , the project would comply with the CALGreen Tier 2 off-street electric vehicle requirements and City of Hayward EV Charging Reach Code.
Hayward CAP (Measure T-6)	14. All Project Types - Off-Road Equipment Electrification. Will the Project/Plan include the use of electrified off-road construction and landscaping equipment (e.g., mowers, chippers, tractors)?	N/A. The air quality analysis determined that mitigated secondary operational emissions from landscaping equipment would not be significant.
Waste		
<i>Materials Recycling & Composting</i>		
Hayward CAP (Measure SW-1 and SW-2)	15. All Project Types - Landfill Diversion Rate Goal. Will the Project/Plan meet current legislation (e.g., SB 1383, AB 1276, etc.), City of Hayward Organics Reduction and Recycling Ordinance requirements, and Hayward CAP goals to sort, recycle, and collect recyclables and organic waste to achieve overall landfill diversion of waste of 75 percent by 2030 and 85 percent by 2045?	Yes. The project would comply with City and state waste construction diversion requirements and utilize recycled building materials as feasible and would salvage at least 65% of nonhazardous construction/demolition debris.
Hayward CAP (Measure SW-1)	16. All Project Types - Organics Recycling Requirement. Will the Project/Plan meet SB 1383 legislation by requiring that residences and businesses post educational signage and sort, compost, and collect organic waste to achieve 75 percent diversion from landfill by 2025 and 90 percent diversion by 2045?	Yes. The project would provide on-site recycling, facilities and adhere to existing City program for solid waste disposal, recycling, and composting.
Hayward CAP (Measure SW-2)	17. All Project Types - Construction and Demolition Debris Recycling. Will the Project/Plan recycle construction waste in accordance with the requirements of the Hayward Construction and Demolition Debris Recycling Ordinance?	Yes. The project will salvage at least 65% of nonhazardous construction/demolition debris.
<i>Green Materials</i>		
Hayward CAP (Measure BE-1)	18. All Project Types - Low-Carbon Concrete. Will the Project/Plan utilize low-carbon concrete in construction?	Yes.
Water		
<i>Water Use Efficiency</i>		

TABLE 5.8-7 SUMMARY OF APPLICABLE 2024 CLIMATE ACTION PLAN MEASURES AND PROJECT CONSISTENCY

Applicable CAP Measure	Requirements	Project Compliance
Hayward CAP (Measure WW-1)	19. All Project Types - Water Conservation. Will the Project/Plan meet water-efficiency standards established by the Hayward Prohibition of Wasteful Water Practices Ordinance, Hayward Municipal Code Chapter 11, Article 2, and CALGreen?	Yes. The project would include water efficient landscaping and ultra-low flow plumbing fixtures.
Hayward CAP (Measure WW-1)	20. All Project Types - Water Efficient Landscaping. Will the Project/Plan implement the Hayward Bay-Friendly Water Efficient Landscape Ordinance (Hayward Municipal Code Chapter 10, Article 12)?	Yes. The project would include water efficient landscaping.
Water Recycling		
Hayward CAP (Measure WW-1)	21. All Project Types - "Graywater Ready". Will the Project/Plan include development that is built "graywater ready" for landscape-related watering?	Yes.
Hayward CAP (Measure WW-1)	22. All Project Types - Recycled Water Connections. Will the Project/Plan include development that connects to the City's recycled water infrastructure if such service is existing or planned in the project area?	N/A. The use of recycled water was investigated but rejected due to insufficient quality, cost, and distance to infrastructure. The City's recycled water infrastructure does not currently extend south of SR 92, and thus is not available in the project vicinity.
Overall Sustainability		
Urban Forest		
Hayward CAP (Measure CS-1)	23. All Project Types - Tree Planting. Will the Project/Plan include new and replacement climate-adaptive/drought tolerant trees in order to increase the Citywide urban forest?	Yes. The project will plant 47 replacement trees and pay into the City's in-lieu fund for new trees. The replacement trees will be climate adaptive.
Hayward CAP (Measure CS-1)	24. All Project Types - Tree Replacement. Will the Plan/Project comply with the tree replacement requirements of Hayward Municipal Code Chapter 10, Article 15, as applicable?	Yes. The project will plant 47 replacement trees and pay into the City's in-lieu fund for new trees to replace the 50 trees to be removed.

Source: DayZen 2025a

Conclusion

Less Than Significant with Mitigation Incorporated. With the incorporation of the project features and mitigation measures **GHG-1**, **GHG-2**, and **GHG-3**, GHG emissions related to the project would be consistent with the applicable plans and policies adopted to reduce GHG emissions and would comply with all regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG

emissions. The potential for the project to conflict with an applicable plan, policy, or regulation for GHG emissions reductions would be less than significant.

5.8.4 Mitigation Measures

GHG-1: The project owner shall participate in PG&E's Regional Renewable Choice Program or Ava Community Energy's Renewable 100 program (100 percent carbon-free electricity) or other clean energy program that accomplishes the same goal of 100 percent carbon-free electricity.

During Operation, the project owner shall provide documentation to the director, or director's designee, of the City of Hayward Development Services Department of initial enrollment and shall submit annual reporting to the director, or director's designee, of the City of Hayward Development Services Department documenting either continued participation in PG&E's Regional Renewable Choice Program or Ava Community Energy's Renewable 100 program, or documentation that alternative measures continue to provide 100 percent carbon-free electricity as verified by an independent third-party auditor specializing in greenhouse gas emissions.

GHG-2: The project owner shall use renewable diesel for 100 percent of total energy use by the gensets, and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The project owner shall provide documentation of renewable diesel supply challenges or disruptions to the director, or director's designee, of the City of Hayward Development Services Department within 10 calendar days of occurrence and demonstrate a good faith effort to comply with the requirement and that compliance is not practicable. The project owner shall provide an annual report of the status of procuring and using renewable diesel to the director, or director's designee, of the City of Hayward Development Services Department demonstrating compliance with the mitigation measure.

GHG-3: Prior to the issuance of any grading or building permits, whichever occurs earliest, the project owner shall submit final design to the director, or director's designee, of the City of Hayward Development Services Department for approval, demonstrating compliance with the CALGreen Tier 2 off-street electric vehicle requirements and City of Hayward EV Charging Reach Code (Hayward Municipal Code Section 10-2.800). Upon completion of construction, the project owner shall provide documentation to the director, or director's designee, of the City of Hayward Development Services Department, confirming compliance with these requirements.

5.8.5 References

Ava 2022 – Ava Community Energy (Ava). Standard LSE Plan, East Bay Community Energy Authority 2022 Integrated Resource Plan, dated November 1, 2022. Accessed March 13, 2025. Accessed online at: https://res.cloudinary.com/diactiwk7/image/upload/v1667342459/2022_IRP_EBC_E_LSE_Plan_xj6yzo.pdf

- Ava 2025 – Ava Community Energy (Ava). How It Works. Accessed March 14, 2025. Accessed online at: <https://avaenergy.org/your-energy-options/how-it-works/>
- BAAQMD 2017 – Bay Area Air Quality Management District (BAAQMD). Final 2017 Clean Air Plan, Adopted April 19, 2017. Accessed August 2024. Accessed online at: https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf
- BAAQMD 2022 – Bay Area Air Quality Management District (BAAQMD). Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans, dated April 2022. Accessed June 2024. Accessed online at: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en>
- BAAQMD 2023 – Bay Area Air Quality Management District (BAAQMD). California Environmental Quality Act Air Quality Guidelines, Updated April 2023. Accessed August 2024. Accessed online at: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>
- CARB 2014 – California Air Resources Board (CARB). First Update to the Climate Change Scoping Plan, dated May 2014. Accessed August 2024. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf
- CARB 2017a – California Air Resources Board (CARB). 2017 Climate Change Scoping Plan Update: The Strategy for Achieving California’s 2030 GHG Target, November 2017. Accessed August 2024. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf
- CARB 2017b – California Air Resources Board (CARB). Short-Lived Climate Pollutant Reduction Strategy, March 2017. Accessed August 2024. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf
- CARB 2022a – California Air Resources Board (CARB). California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators. Date of Release: October 26, 2022. Accessed February 2024. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf
- CARB 2022b – California Air Resources Board (CARB). 2022 Scoping Plan for Achieving Carbon Neutrality, November 16, 2022. Accessed February 2024. Accessed online at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>
- CEC 2020a – California Energy Commission (CEC). ROC with US EPA and CEC staff G. Bemis - Supersedes TN 234348 (TN 234353), August 2020. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-SPPE-01>

- CEC 2022 – California Energy Commission (CEC). (TN 247764). Report of Conversation re: STACK Trade Zone Park Renewable Diesel Use, dated November 29, 2022. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-02>
- CEC 2023 – California Energy Commission (CEC). (TN 252664) Bowers Backup Generating Facility Final EIR - Part 1, dated October 20, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-SPPE-01>
- DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023c – DayZenLLC (TN 252251). STACK SVY03A – SPPE Application – Appendices A and B, Part III of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023h – DayZenLLC (TN 253638). STACK SVY03A –STACK Responses to CEC Data Request Set 1, dated December 15, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2024h – DayZenLLC (TN 254766). SVY03A Campus Supplemental Data Responses Set 1 DR-9, dated March 1, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2024m – DayZenLLC (TN 259547). STACK SVY03A Air Quality Modeling Memo, dated October 15, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2025a – DayZenLLC (TN 261327). STACK Responses to Data Responses Set 5-SVY03A, dated January 28, 2025. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- Hayward 2014 – City of Hayward (Hayward). 2040 Hayward General Plan. July 2014. Accessed December 2024. Accessed online at: [Hayward-2040-General-Plan-Downloadable.pdf](#)
- Hayward 2023 – City of Hayward (Hayward). California Environmental Quality Act Greenhouse Gas Emissions Thresholds and Guidance. October 5, 2023. Accessed March 13, 2025. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/Final%20CEQA%20GHG%20Emissions%20Thresholds%20Guidance%20Rpt.pdf>
- Hayward 2024 – City of Hayward (Hayward). Hayward Climate Action Plan. January 31, 2024. Accessed December 2024. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/FINAL%20CAP%20w%20all%20Appendices%201.30.24.pdf>

- Hayward 2025 – City of Hayward (Hayward). Greenhouse Gas Emissions Inventory: Review and Discuss 2023 Greenhouse Gas Emissions Inventory. March 18, 2025. Accessed March 20, 2025. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/2025-03-18-GHG-Inventory-Council-Rpt.pdf>
- IPCC 2013 – Intergovernmental Panel on Climate Change (IPCC). Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp, doi:10.1017/CBO9781107415324. Accessed August 2024. Accessed online at: <https://www.ipcc.ch/report/ar5/wg1/>
- MTC & ABAG 2017 – Metropolitan Transportation Commission and Association of Bay Area Governments (MTC & ABAG). Plan Bay Area 2040. Adopted July 26, 2017. Accessed August 2024. Accessed online at: https://mtc.ca.gov/sites/default/files/Final_Plan_Bay_Area_2040.pdf
- PG&E 2022a – Pacific Gas & Electric (PG&E). PG&E Climate Strategy Report dated June 2022. Accessed August 2024. Accessed online at: <https://www.pge.com/content/dam/pge/docs/about/corporate-responsibility-and-sustainability/pge-climate-strategy-report.pdf>
- PG&E 2022b – Pacific Gas & Electric (PG&E). Final 2022 Integrated Resource Plan dated 1 November 2022. Accessed August 2024. Accessed online at: <https://www.pge.com/assets/pge/docs/about/doing-business-with-pge/2022-PGE-Integrated-Resource-Plan.pdf>
- PG&E 2023 – Pacific Gas & Electric (PG&E). 2023 Power Content Label. Accessed March 15, 2025. Accessed online at:
- U.S. EPA 2022 – United States Environmental Protection Agency (U.S. EPA). Inventory of U.S. Greenhouse Gas Emissions and Sinks. Accessed November 2024. Accessed online at: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

5.9 Hazards and Hazardous Materials

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to hazards and hazardous materials. The term "hazardous materials" includes both hazardous substances and hazardous wastes.

HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.9.1 Environmental Setting

Hazardous Waste and Hazardous Substances Sites

Existing and past land use activities are commonly used as indicators of sites or areas where hazardous material storage and use may have occurred or where potential

environmental contamination may exist. For example, many historic and current industrial sites have soil or groundwater contaminated by hazardous substances. Other hazardous materials sources include leaking underground tanks in commercial and rural areas, contaminated surface runoff from polluted sites, and contaminated groundwater plumes. Current and former agricultural properties commonly have herbicide, pesticide, and/or fumigant soil contamination.

The project site is located within the city of Hayward in Alameda County in an urban environment consisting primarily of a mix of light industrial, commercial, and business park properties. Properties to the northeast, southeast, and southwest of the project site are primarily light industrial facilities, business parks, and warehouses. South of the light industrial/warehouse properties southeast of the project site is the PG&E Eastshore Substation. Properties northwest of the project site across Eden Landing Road are commercial and consist of a strip mall with two buildings occupied primarily by restaurants. North of the commercial buildings and the project site is Highway 92.

EBI Consulting (EBI) conducted a Phase 1 Environmental Site Assessment (ESA) in 2021 to determine the location of any hazardous waste and hazardous material sites within and adjacent to the project site and to identify any recognized environmental conditions. The Phase I ESA for the project included a review of a previous 2017 EBI Phase I ESA for the 26010 Eden Landing Road property; a search of Environmental Data Resources, Inc.'s (EDR's) proprietary database related to generation, storage, handling, transportation, treatment of wastes, and the remediation of contaminated soil and groundwater sites; a site reconnaissance of the project site; searches of the Hayward Fire Department (HFD) hazardous materials records and Alameda County Environmental Health Department (EHD) records; and, reviews of the online State Water Resources Control Board's (SWRCB) GeoTracker and California Department of Toxic Substance Control's (DTSC) EnviroStor databases (DayZenLLC 2023e).

The project area was used for agricultural purposes starting in at least 1939 when the site appears to have been primarily row crops with scattered rural residences and outbuildings. Starting around 1960, in addition to two residences on the site, a portion of the site was occupied by commercial/light industrial businesses consisting of a goldfish supply business from 1960 to 1973 and a truck yard/trucking business that was on the northern end of the site from 1963 to 1965. The trucking yard was removed from the site when Highway 92 was constructed near the northern end of the site in 1968. The current nine onsite business park buildings were completed in the early to mid-1970s (DayZenLLC 2023e).

The onsite business park buildings are multi-tenant buildings and include units with a variety of business uses including service industry, commercial, office space, warehouse, and some light industrial uses. No fueling, heavy industrial, or large-scale manufacturing operations are conducted in the buildings on the project site (DayZenLLC 2023e). Adjacent properties consist of multi-building and tenant business parks, light industrial and warehouse properties, and Highway 92.

The 2017 Phase I ESA noted that based on the history and use of the project site that current and historical uses of the site did not represent an environmental concern to the property. Additionally, the 2017 Phase I ESA noted several contaminated sites within the vicinity of the 26010 Eden Landing Road site (DayZenLLC 2023e). The information from the 2017 EBI Phase I ESA for the 26010 Eden Landing Road property was summarized in and was consistent with information provided in the 2021 EBI Phase I ESA for the project (DayZenLLC 2023e).

The EDR and other environmental searches conducted for the 2021 EBI Phase I ESA for the project identified hazardous materials users and hazardous waste generators at the project site. However, no known releases of hazardous materials have been listed for the project site. Additionally, no known current or former underground storage tanks (USTs) or above ground storage tanks (ASTs) are located at the project site (DayZenLLC 2023e). A review of the GeoTracker and Envirostor database websites conducted in November 2024 for this project confirmed the lack of known environmental releases and USTs at the project site (SWRCB 2024; DTSC 2024). The EDR database search and EBI's record reviews did identify environmental contamination/releases at several adjacent and nearby properties (DayZenLLC 2023e). The November 2024 GeoTracker and Envirostor database reviews primarily confirmed information provided in the 2021 EDR database search conducted by EBI but did also provide some additional data (SWRCB 2024; DTSC 2024). Environmentally contaminated sites/listings identified adjacent and near to the project site in the EBI Phase I ESA and by the 2024 Geotracker and Envirostor reviews are summarized below:

- Fairbanks Scales, 3494 Investment Blvd (adjacent to the project site). A release of gasoline to other groundwater was reported 03/21/1985 and was reported as case closed March 3, 1998. A 1996 letter from the City of Hayward requested sampling to evaluate closure and included analytical results from one groundwater sample from 1985 that indicated gasoline at 0.47 parts per million (ppm) (DayZenLLC 2023; SWRCB 2024). EBI determined that based on the cross-gradient location and case closed status, this site is unlikely to present an environmental concern.
- Eden Plaza Props, 3521-3583 Investment Blvd (south and adjacent to the project site). EDR database indicated that this site was listed on the Superfund Enterprise Management System (SEMS) database from 1987 to 1989, listed on the Envirostor database in 1989, and referred to the San Francisco Bay Regional Water Control Board (SFBRWCB) in 2002. A 1989 preliminary assessment report for the site indicated that volatile organic compounds (VOCs) were detected in the groundwater and soil at the site in 1987 which included trichloroethylene [TCE], Freon 50, and trichlorofluoromethane (Freon-11) in groundwater, and TCE in soil. The 1989 report indicated there were no documented unauthorized releases at this site and no known records of hazardous waste activities; the Regional Board determined the contamination source was upgradient of this site. No remedial actions are noted for this site (DayZenLLC 2023e). Neither Geotracker nor Envirostor currently lists any known release sites or USTs at this site (SWRCB 2024, DTSC 2024). Based on the

cross-gradient to down-gradient location and no further action status, EBI determined this site is unlikely to present an environmental concern.

- Breakwater Business Park, Breakwater Ave (500 feet north-northwest of the project site, north of Hwy 92). Listed on the Cleanup Program Sites, formerly known as Spills, Leaks, Investigations, and Cleanups, (CPS-SLIC) database. A 1987 report reviewed by EBI for this site indicates solvents were identified in the groundwater beneath the site in 1987. Groundwater was determined to be at 9 to 12.5 feet below ground surface (bgs) and to flow to the southwest. Three VOCs consisting of TCE, trichloroethane (TCA), 1,1-dichloroethene (DCE), 1,1-dichloroethane (DCA) were detected in one well at the southwest side of the site. An on-site source was not identified, and the contamination was attributed to an off-site source and no further action was recommended in the 1987 report. Per the EBI Phase I ESA, the case remains inactive/open with no activity has been reported since 1987 (DayZenLLC 2023e). Additionally, Geotracker currently identifies one case closed CPS listing and three case closed leaking underground tank (LUST) listings in this business park. The case closed CPS listing is for Former Excel Moving Services at 3503 Breakwater Court (within the Breakwater Business Park), which has groundwater contaminated with residual hexavalent chromium and the onsite soil may contain residual diesel and hexavalent chromium contamination. The site was closed with a land use covenant and deed restriction that requires no groundwater extraction, limits on types of uses, and no excavation without agency review and approval (SWRCB 2024). The case closed LUST listings include: Weyerhaeuser Company at 3495 Breakwater Ct, listed as case closed in 1994 after a year of non-detect groundwater testing results; Unocal / Tosco - Facility #6074 at 3500 Breakwater Ave, listed as case closed in 2010 with a degrading, non-migrating gasoline plume with contaminant concentrations primarily below reporting limits; and Excel Moving Services at 3503 Breakwater Ct, listed as administratively case closed in 2010 and moved to being handled as part of the Former Excel Moving Services CPS listing (SWRCB 2024). GeoTracker lists one active UST listed at 3500 Breakwater Ave for the current active Unocal/76 gas station. Although contamination has previously and currently exists at this business park, it is located downgradient of the project site and therefore this contamination is unlikely to present an environmental concern to the project site.
- Wachovia, 3210 Investment Blvd (800 feet east of the project site). EBI's Phase I ESA identifies this site as a CPS-SLIC listing with VOCs detected on groundwater that appeared to have originated from an upgradient source (DayZenLLC 2023e). VOCs were detected in groundwater beneath the site in 1994. As of 1996 low levels of chlorinated volatile organic compounds, including 1,1-dichloroethane (1,1-DCA) and 1,1-dichloroethene (1,1-DCE) had been detected in groundwater underlying the subject site and no onsite source for the contamination had been identified (SWRCB 2024). No record of onsite remedial actions is noted other than natural attenuation. In 2011 the site was granted case closure with a land use covenant that restricts use of the property to industrial, commercial, or office space use and prohibits the

drilling of water supply wells on the property (SWRCB 2024). This site is upgradient of the project site and contaminated groundwater may have migrated towards the project site.

- Custom Commercial Dry Cleaners/Love Property, 3201 Investment Blvd (950 feet east of the project site). VOCs contamination of the underlying groundwater was reported in 1996, and investigations identified several VOCs, including 1,1-DCE, were detected in the groundwater. Groundwater was found at depth of 4 to 10 feet bgs and predominantly flowed to the south. In 1996 the Regional Board noted that the plume likely emanated from the property and that remediation would probably not be necessary for the plume given its relatively small aerial extent and low concentrations (1,1-DCE up to 220 ppb). Groundwater sampling performed between 1998 to 2011 identified 1,1-DCE at declining concentrations, but still at levels that exceeded the drinking water and aquatic habitat Environmental Screening Levels (ESLs) (SWRCB 2024). In 2011 the site was granted case closure with a land use covenant and environmental restriction recorded that restricts land use to industrial, commercial or office space and prohibits the drilling of water supply wells (DayZenLLC 2023e; SWRCB 2024). This site is cross- to upgradient of the project site and contaminated groundwater may have migrated towards the project site.
- Former Criton Technologies Facility, 26415 Corporate Avenue (1100 feet east of project site). This site was identified in the 2024 GeoTracker review as a Cleanup Program Site and is a former aluminum anodizing plant that operated from 1969 to 1993 and was demolished in 1994 to 1995 (SWRCB 2024). Several instances of vandalism occurred on the site in the late 1980s and early 1990s that resulted in spills of hazardous materials at the site and several other releases were also noted during this time period. Soil sampling and testing of release locations, hazardous material use and storage areas, and soil stockpiles from previous site operations identified elevated levels of several contaminants in the soil including: metals (nickel, lead, and chromium), total petroleum hydrocarbons (TPH), and polychlorinated biphenyls (PCBs). Groundwater sampling and testing did not reveal and significant impacts to groundwater beneath the site due to the previous site operations. Soil contamination was remediated by soil excavation and removal. The site was granted case closure by the San Francisco Bay Regional Water Quality Control Board in 1995 (SWRCB 2024). Due to the lack of groundwater contamination at the site and the distance from the project site, this site is not of environmental concern to the project.
- Wachovia Property, 26545-26563 Corporate Ave (1350 feet southeast of the project site). Release of chlorinated solvents to groundwater was reported in 1987 and the site was listed as case closed in 2015. A release of VOCs (including PCE, TCE, cis-1,2-DCE, tras-1,2-DCE and vinyl chloride) was traced to a former dumpster storage area that that a tenant of the property, Budget Furniture Rental (1987-1991), operated. Remedial activities consisting of soil removal occurred in 1996 and groundwater extraction and treatment between 1997 and 1999. Groundwater concentrations in the source area and immediately downgradient showed a

decreasing trend that was determined to likely continue to decline through natural attenuation, ultimately reaching water quality objectives (DayZenLLC 2023e). The site was closed in 2015 with a deed restriction in place that limits the use of the property to commercial/industrial purposes and restricts the use of shallow groundwater (DayZenLLC 2023e; SWRCB 2024). Residual concentrations were determined to not pose unacceptable risks to human health or the environment. This site is cross- to upgradient of the project site and contaminated groundwater may have migrated towards the project site.

- Utah Fund, 26569-26575 Corporate Ave (1480 feet SE). A 1987 report is available and referenced the initial identification of 140,000 ppb TCE in groundwater in 1987. A 1996 memo regarding activities on the site included a TCE plume map for the area surrounding the subject site that indicated that TCE concentrations underlying the site likely ranged from 10 to 1000 ppb in 1996 (SWRCB 2024). Per the EBI Phase I ESA the case status is open/inactive as of 2020, however no specific information or listing for status of this site is available on GeoTracker (DayZenLLC 2023e; SWRCB 2024). This site was investigated along with the adjacent Wachovia Property. This site is cross- to upgradient of the project site and contaminated groundwater may have migrated towards the project site.

EBI conducted a limited visual screening survey for the presence of asbestos containing material (ACM) at the project site and identified friable suspect ACM in the form of textured wall surfacing materials, sheetrock/joint compound composite material, and acoustical ceiling tile. EBI identified non-friable suspect ACM in the form of vinyl flooring and associated mastic and roofing materials (DayZenLLC 2023j). These materials were observed to be undamaged and in good condition at the time of assessment. The limited visual screening survey was limited to visual observations of accessible areas and did not include the collection and laboratory analysis of bulk samples of undamaged suspect ACM. EBI recommended that an asbestos inspection be performed in accordance with regulations and any removal performed by qualified trained personnel.

Airports

The Hayward Executive Airport is located approximately 1.7 miles northeast of the project site. Based on the 2012 Hayward Executive Airport Land Use Compatibility Plan (ALUCP) (Alameda County ALUC 2012), the project site is located within the airports influence area, but it is not within an airport noise or safety compatibility zone. The project site is located within a FAR Part 77 Surface area (Alameda County ALUC 2012).

Schools

There are no schools within 0.25 mile of the project site. The closest schools are California Crosspoint Academy, which is approximately 0.60 miles northeast of the project site and Eden Gardens Elementary School, which is approximately 0.80 miles northeast of the project.

Emergency Evacuation Routes

The Alameda County Emergency Operations Plan (Alameda County 2012b) and the Hayward Local Resilience Plan (Hayward 2025) provide a description of hazards in the county. The plan identifies policies and procedures that define how Alameda County and Hayward will prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. These plans do not identify any designated evacuation routes near the project site.

Wildfire Hazards

The project would be located within Alameda County in the City of Hayward and fire protection is provided by the Hayward Fire Department.

The California Department of Forestry and Fire Protection (Cal Fire) identifies, and maps areas of significant fire hazards based on fuels, terrain, and other relevant factors. The maps identify this information as a series of Fire Hazard Severity Zones, which are progressively ranked in severity as un-zoned, moderate, high, and very high. State responsibility areas (SRAs) are locations where the State of California is responsible for wildland fire protection. Local responsibility areas (LRAs) are locations where the responding agency is the local county or city. LRA FHSZ are mapped as either Very High Fire Hazard Severity Zones (VHFHSZ) or as Non-VHFHSZs. The Cal Fire maps for Alameda County (Cal Fire 2023) indicate that the project site is located in an LRA. Within the LRA, the project site falls within an area mapped as a Non-VHFHSZ (CAL FIRE 2025). The project site is within a fully urbanized area and is unlikely to be exposed to wildland fires. For more information on wildfire hazards, see **Section 5.19 Wildfire**.

Regulatory Background

Hazardous substances, hazardous materials and hazardous waste are defined by law to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Hazardous substances are defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 101(14), and also in state law in California Health and Safety Code section 78075. Hazardous waste is defined in Title 22, California Code of Regulations, sections 66260.10. and 66261.3. California Health and Safety Code section 25501, defines a hazardous material.

For this analysis, contaminated soil that is excavated from a site may be considered a hazardous waste (if it meets the criteria in California Code of Regulations, Title 22, sections 66260.10 and 66261.3) hazardous substance (if it meets the criteria in CERCLA or HSAA), or hazardous material (Health & Saf. Code, s 25501.) Remediation (cleanup

and safe removal/disposal) may also be required under oversight of relevant regulatory agencies such as DTSC, RWQCB, CUPA or US EPA. Cleanup requirements are determined on a case-by-case basis by the lead agency pursuant to applicable requirements.

Federal

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.) authorizes the EPA to control hazardous waste from “cradle to grave” (generation, transportation, treatment, storage, and disposal). The EPA approved California’s RCRA program, referred to as the Hazardous Waste Control Law (Health and Safety Code § 25100 et seq.) in 1992 chlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.

Toxic Substances Control Act. The Toxic Substances Control Act (TSCA) (15 U.S.C. § 2601 et seq.) authorizes the EPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.

Comprehensive Environmental Response, Compensation, and Liability Act. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601 et seq.), including the Superfund program, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The National Contingency Plan also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Department of Transportation. The United States Department of Transportation (DOT) is the primary federal agency responsible for regulating the proper handling and storage of hazardous materials during transportation (49 C.F.R. §§ 171-177 and 350-399).

Hazardous Materials Transportation Act. DOT, in conjunction with the EPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials under the Hazardous Materials Transportation Act (HMTA) 49 U.S.C. 5101-5128. DOT regulations implementing the Act (49 CFR parts 171-180), regulate the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials. This also includes regulations relevant to the storage

of explosives, as well as the packaging, labeling, materials compatibility, driver qualifiers, and safety of transported explosives.

Clean Water Act. The Clean Water Act (CWA) is the principal federal statute protecting navigable waters and adjoining shorelines from pollution. The law was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. Since its enactment, the CWA has formed the foundation for regulations detailing specific requirements for pollution prevention and response measures. The EPA implements provisions of the CWA through a variety of regulations, including the National Contingency Plan, and the Oil Pollution and Prevention Regulations. Implementation of the CWA is the responsibility of each state.

As part of the CWA, the EPA oversees and enforces the Oil Pollution Prevention regulation (Title 40, CFR, Part 112), which is often referred to as the Spill Prevention, Control, and Countermeasure (SPCC) "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement SPCC Plans. A facility is subject to SPCC regulations if the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "navigable waters" of the United States. The rule specifies that proactive, and not passive, measures be used to respond to oil discharges.

Federal Aviation Administration. Title 14, Part 77.9 of the Code of Federal Regulations (CFR) requires Federal Aviation Administration (FAA) notification for any construction or alteration of navigable airspace exceeding 200 feet above ground level (AGL). It also requires notification for construction or alterations within 20,000 feet of an airport with a runway more than 3,200 feet in length if the height of the construction or alteration exceeds a slope of 100 to 1 extending outward and upward from the nearest point of the nearest runway of the airport.

If a project's height exceeds 200 feet or exceeds the 100:1 surface, the project applicant must submit a copy of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA.

State

California Environmental Protection Agency. The California Environmental Protection Agency (Cal EPA), created in 1991, unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), Integrated Waste Management Board (now Department of Resources Recycling and Recovery or CalRecycle), DTSC, Office of Environmental Health Hazard Assessment, and Department of Pesticide Regulation under one agency. These agencies under the Cal EPA "umbrella" provide protection of human health and the environment and ensure the coordinated deployment of state resources. Their mission

is to restore, protect and enhance the environment, to ensure public health, environmental quality, and economic vitality.

The California Hazardous Waste Control Law. The California Hazardous Waste Control Law (HWCL) is the state law that implements and enforces federal hazardous waste law in California and directs DTSC to oversee and implement the state's hazardous waste program. The HWCL covers the entire management of hazardous waste, from hazardous waste generation to management, transportation, and ultimately disposal of waste into a state or federally authorized facility. DTSC administers the California Hazardous Waste Control Law. The HWCL, California Code of Regulations, title 22, Chapter 11, Appendix X, contains a list of 791 chemicals and 66 common names of waste. If the waste is listed or contains a listed chemical in Appendix X, it creates a presumption that the waste may be hazardous due to the presence of that chemical. The HWCL also contains requirements for identifying, managing, storing, transporting and labeling hazardous wastes; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some hazardous wastes that cannot be disposed of in landfills.

The Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA). The HSAA (Health and Safety Code section 78000 et seq.), authorizes DTSC to take response actions necessary (e.g., cleanup of a site) when there may be an imminent and substantial endangerment because of a release or threatened release of hazardous substances. The HSAA also authorizes DTSC to compel a responsible party to conduct response actions at the site and/or to pay for response actions conducted by DTSC. (Health & Saf. Code, § 78655.) The HSAA and its federal counterpart, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), authorize DTSC to recover all costs it incurs in response actions from responsible parties. (Health & Saf. Code, § 79650; 42 U.S.C. § 9607.)

Department of Toxic Substances Control. DTSC is a department within Cal EPA and is the primary agency in California that regulates the generation, transportation, treatment, storage and disposal of hazardous wastes. DTSC's responsibilities include delegated authority under the federal RCRA, California's HWCL, and state laws pertaining to hazardous waste, packaging and consumer products, as well as the management and disposal of universal wastes such as electronic waste. The HSAA also provides DTSC with general administrative responsibility for overseeing the state's responses to spills or releases of hazardous substances, and for hazardous waste disposal sites that pose a threat to public health or the environment. The HSAA provides DTSC with the authority, procedures, and standards to investigate, remove, and remediate contamination at sites; issue and enforce a removal or remedial action order to any responsible party; and impose administrative or civil penalties for noncompliance with an order. Federal and state laws also authorize DTSC to recover costs and expenses incurred by carrying out these activities.

California Occupational Safety and Health Administration. California Occupational Safety and Health Administration (Cal OSHA) is the primary agency responsible for worker safety related to the handling and use of chemicals in the workplace. Cal OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (Cal. Code Regs., Title 8, §§ 337340.). Regulations for to worker safety and protection as related to exposure to asbestos and lead are included in California Code of Regulations, Title 8, Article 4, sections 1528-1537. Cal OSHA regulations also specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings (Cal. Code Regs., Title 13, §§ 1160-1167).

The Aboveground Petroleum Storage Act (APSA) Program. APSA requires tank facilities with an aggregate storage capacity of than 1,320 gallons or more of petroleum to develop and implement the federal Spill Prevention Control and Countermeasures (SPCC) Plan requirements (CFR 2021). A tank facility is any tank or tanks that are aboveground, including connected piping, that contain petroleum and are used by an owner or operator at a single location or site, is in secondary containment, and it is used to hold petroleum (*See* Health & Safety Code, § 25270.2). CAL FIRE-Office of the State Fire Marshal (OSFM) is responsible for ensuring the implementation of the APSA element of the Unified Program. The CUPA (Hayward Fire Department) regulates businesses storing petroleum in aboveground containers or tanks. (California Health & Safety Code, Chapter 6.67, §§ 25270-25270.13)

Porter-Cologne Water Quality Act. This state law provides a comprehensive water quality management system for the protection of California waters. The act designates the SWRCB as the ultimate authority over State water rights and water quality policy and also established nine RWQCBs to oversee water quality on a day-to-day basis at the local and regional level. The RWQCBs have the responsibility of granting NPDES permits and setting waste discharge requirements for stormwater runoff from construction sites.

Hazardous Materials Release Response Plans and Inventory Law. The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act, Health and Safety Code § 25500 et seq.) requires businesses that store or use hazardous materials to prepare a Hazardous Materials Business Plan (HMBP) and submit it to the CUPA. An HMBP includes details of a facility and business conducted at the site, an inventory of hazardous materials that are handled and stored on-site, an emergency response plan, and a safety and emergency response training program for new employees with an annual refresher course.

California Accidental Release Program. Under the California Accidental Release Program (CalARP) regulations, facilities that store extremely hazardous substances or regulated substances above the threshold quantities must register with the CalARP Program and submit a Risk Management Plan (RMP).

Local

Hayward Fire Department. The Hayward Fire Department (HFD) has been designated as the Certified Unified Program Agency (CUPA) for the City of Hayward by the Cal EPA. The CUPA is the local administrative agency that coordinates the regulation of hazardous materials and hazardous wastes in the City of Hayward through oversight of the following programs and codes: Hazardous Materials Business Plan (HMBP), Hazardous Waste Generator permit, Hazardous Waste Treatment permits (Permit by Rule, Conditional Authorization, Conditionally Exempt), Underground Storage Tank (UST) Program, Aboveground Petroleum Storage Act (APSA) program, California Accidental Release Prevention (CalARP), and Fire Code (pipeline safety).

Alameda County Department of Environmental Health (ACDEH). The Alameda County Department of Environmental Health (ACDEH), in partnership with the Alameda County Public Works Agency, implements the industrial and commercial site control program to comply with the San Francisco Bay Municipal Regional Stormwater Permit (MRP) which covers stormwater discharges from Alameda County. Through the Clean Water Program, ACDEH helps reduce or eliminate the pollution of receiving waters, including creeks and the San Francisco Bay; and protect and enhance the water quality in county water bodies, including watercourses, wetlands, creeks, and flood control facilities.

City of Hayward General Plan. The Hazard Element of the Hayward 2040 General Plan includes goals and policies applicable to all development projects in Hayward. The following hazards and hazardous materials policies are applicable to the proposed project:

- Policy HAZ-6.2 Site Investigations. The city shall require site investigations to determine the presence of hazardous materials and/or waste contamination before discretionary project approvals are issued by the city. The city shall require appropriate measures to be taken to protect the health and safety of site users and the greater Hayward community.
- Policy HAZ-6.3 Permit Requirements. The city shall direct the Fire Chief (or their designee) and the Planning Director (or their designee) to evaluate all project applications that involve hazardous materials, electronic waste, medical waste, and other hazardous waste to determine appropriate permit requirements and procedures.
- Policy HAZ-6.4 Land Use Buffers. The city shall review applications for commercial and industrial uses that involve the use, storage, and transport of hazardous materials to determine the need for buffer zones or setbacks to minimize risks to homes, schools, community centers, hospitals, and other sensitive uses.
- Policy HAZ-6.8 Truck Routes. The city shall maintain designated truck routes for the transportation of hazardous materials through the City of Hayward. The city shall discourage truck routes passing through residential neighborhoods to the maximum extent feasible.

- Policy HAZ-7.1 Land Use Safety Compatibility and Airspace Protection Criteria. The City shall consider all applicable federal statutes (including 49 U.S.C. 47107), federal regulations (including 14 Code of Federal Regulations 77 et seq.), the FAA's Airport Compliance Manual, FAA Advisory Circulars and other forms of written guidance, and State law, with respect to criteria related to land use safety and airspace protection when evaluating development applications within the Airport Influence Area of the Hayward Executive Airport.

Alameda County Emergency Operations Plan. The 2012 plan establishes the foundational policies and procedures that define how Alameda County will prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. It provides a description of hazards in the county and of the emergency management organization and how it is activated. The plan does include a list of evacuation routes.

Local Resilience Plan. The purpose of Hayward's (LRP) is to assess hazard risks and asset vulnerability in the City of Hayward and use that information to identify strategies to reduce future losses from natural hazards. The 2021 LRP serves as a guiding document for the City's hazard mitigation activities and was developed in fulfillment of and alignment with the City Council's "Safe" priority and informed by General Plan Community Safety Element and Hazards Element goals.

5.9.2 Environmental Impacts

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

Construction

Less Than Significant Impact with Mitigation Incorporated. During the construction and demolition phases of the project, the only hazardous materials used would be paints, cleaners, solvents, gasoline, motor oil, welding gases, and lubricants. When not in use, any hazardous material would be stored in designated construction staging areas in compliance with local, state, and federal requirements. Any impacts resulting from spills or other accidental releases of these materials would be limited to the site due to the small quantities involved and their infrequent use.

Due to the age of the buildings on the project site, there is a potential that ACM or LBP could be present in the building materials and released by demolition activities. This could expose construction workers and other nearby people to harmful levels of ACM or LBP. Permits for demolition would be required from the Bay Area Air Quality Management District (BAAQMD) that require an asbestos survey prior to commencement of demolition activities. Any LBP or ACM discovered would be removed and remediated in accordance with applicable BAAQMD regulations and any other applicable local and state regulations. Although the BAAQMD demolition permit requires

ACM testing and regulates demolition of ACM contaminated structures and removal of ACM, it does not require LBP testing be conducted nor does it regulate demolition of LBP contaminated structures. Existing regulations from Cal EPA, Cal OSHA, and CDPH regulate the handling and disposal of lead and LBP. However, there are no existing regulations that require testing for LBP in commercial buildings.

The applicant does not propose any measures to reduce impacts from ACM or LBP and relies strictly on existing regulations to reduce the potential for ACM and LBP exposure/contamination. The applicant indicates that in conformance with existing regulatory programs and State and local laws they would implement the following measures:

- In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint.
- Prior to demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, California Code of Regulations, Title 8, section 1523.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.
- All potentially friable ACMs shall be removed in accordance with NESGAP guidelines prior to any building demolition or renovation that may disturb the materials and managed in accordance with HWCL. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in California Code of Regulations, Title 8, Section 1529, to protect workers from exposure to asbestos.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements.

Staff concurs that requirements for testing of ACM and for removal and disposal of ACM and LBP are covered by existing regulations and that compliance with these regulations would reduce potential ACM and LBP impacts, with the exception that there are no regulations that require LBP testing for commercial properties prior to demolition. ACM and LBP contaminated materials shall be handled, transported, and disposed of per applicable local, state, and federal regulations. Since the buildings have the potential for LBP, but testing is not required, staff recommends mitigation measure **HAZ-1** for testing of LBP contaminated materials prior to demolition of the onsite buildings.

During construction, the fuel tanks for the diesel-fired generators would have to be filled. The transportation of the diesel fuel to the site would take more than a few tanker truck trips. Diesel fuel has a long history of being routinely transported and used as a common motor fuel. It is appropriate to rely upon the extensive regulatory program that applies to the shipment of hazardous materials on California highways and roads to ensure safe handling in general transportation (see Federal Hazardous Materials Transportation Law, 49 USC § 5101 et seq., DOT regulations 49 C.F.R. subpart H, §§ 172–700, and California Department of Motor Vehicles (DMV) regulations on hazardous cargo). Thus, the transportation of diesel fuel would pose a less than significant risk to the surrounding public.

Therefore, the routine transport, use or disposal of hazardous materials during project demolition and construction would have a less than significant impact to the public or the environment through compliance with regulations and implementation of mitigation measure **HAZ-1**.

Operation

Less Than Significant Impact. Some oils and lubricants could be stored on-site for maintenance of mechanical equipment in the equipment yards. Minor amounts of hazardous materials could also be stored and used on-site for operation and maintenance of the data center and associated facilities. Additionally, hazardous materials located on site would be identified on the project's Hazardous Materials Business Plan. Diesel fuel would be used for routine maintenance and testing and during emergency operation of the generators. Air quality regulations limit each engine to no more than 50 hours of operation annually for reliability purposes (i.e., testing and maintenance). Maintenance and readiness testing usually occurs at loads ranging from 10 to 100 percent load.

Projects with diesel-fired back up generators would use standard practice for fuel quality and maintenance of stored diesel fuel. Standard practice includes that each engine would have a fuel filtration system that would filter the fuel contents daily. The fuel filtration system would be inspected quarterly, and a fuel sample would be collected for testing. The fuel filters would be replaced as needed or annually which would reduce any effects of fuel degradation on engine components and operation. Waste fuel filters will be managed in compliance with HWCL. Commercial diesel fuels also contain biocides that prevent microbial growth and additives that help to stabilize the fuel for several months.

Although diesel fuel would be stored on-site, it would be stored in fuel tanks integrated into the generators. Each stacked pair of diesel-fired backup 2.75 MW generators would have a total storage capacity of 11,500 gallons of diesel fuel and 500 gallons of DEF; each of the two unstacked 2.75 MW generators would have diesel fuel capacity of 5000 gallons and 500-gallon DEF tanks. The 1.0 MW generator would have a 1,000-gallon diesel fuel tank and a 350-gallon DEF storage tank. The 175-kW generator would have a 356-gallon fuel tank (DayZenLLC 2024a). Each generator unit and its integrated fuel

tanks have been designed with double walls to meet APSA requirements and do not require secondary containment structures to be constructed. The interstitial space between the walls of each tank is continuously monitored electronically for the existence of liquids. This monitoring system is electronically linked to an audible and visual alarm system that alerts personnel if a leak is detected (DayZenLLC 2023b). The above design features would ensure that the diesel fuel generators meet the secondary containment requirements in the APSA for the above ground petroleum storage tank program.

Diesel fuel would be scheduled and delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of 8,500 gallons. Diesel fuel transport would comply with all appropriate regulations regarding transport of hazardous materials on California roads and highways. The tanker truck would park at the gated entrance to the generator yard for re-fueling. The 1 MW generator would utilize a spill containment box integral to the fill port with a 7-gallon capacity and the 2.75 MW generators are equipped with a tightly sealed main tank fill box and day tank fill box. Both utilize an overfill prevention valves integral to the generator assembly. Filling of the tanks would not be left unattended. The internal tanks within the generator assemblies are equipped with overflow prevention valves and catch basins sized for expected fuel capacity. Generators are on a continuous concrete platform in which minor spills related to filling can be contained and cleaned (DayZenLLC 2023j).

Drains would be blocked off by the truck driver and/or facility staff during fueling events to prevent fuel from being released into the storm drain system in the event of spills. Additional measures, such as rubber pads, would be used to block storm sewer drains and prevent discharges from entering the during fueling events. The DEF tank located within each generator enclosure can be filled in place from other drums, totes, or bulk tanker truck at the tank top (DayZenLLC 2024a). DEF spills/ leaks during commissioning and operations would be contained in a box at the point of connection. For leaks or spills that are large and may cause an overflow from the box there will be spill kits available on site to help absorb the liquid (DayZenLLC 2023j).

To further minimize the potential of diesel fuel encountering stormwater, to the extent feasible, fueling operations would be scheduled at times when storm events are improbable. Warning signs and/or wheel chocks would be used in the loading and/or unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines. An emergency pump shut-off would be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures would be posted at the loading and unloading areas (DayZenLLC 2023b).

Hazardous materials storage at the project site would be regulated under local, state and federal regulations. For example, the project would be subject to the Aboveground Petroleum Storage Act (APSA) due to the volume of fuel that would be stored in aboveground tanks. Tank facilities under the Aboveground Petroleum Storage Act must comply with all requirements and prepare and implement a SPCC plan, which the

applicant has committed to preparing. The spill prevention measures described above would be incorporated into the plan. Additionally, a HMBP would be required and completed for the safe storage and use of chemicals and would incorporate all relevant regulations. Transport of diesel fuel would comply with regulations that apply to the shipment of hazardous materials on California highways and roads to ensure safe handling in general transportation. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. Project operation would not create a hazard to the public and thus impacts would be less than significant.

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

Construction

Less Than Significant Impact. As described under the discussion for impact criterion “a”, project construction would require the limited use of hazardous materials, such as fuels, lubricants, and solvents. The storage and use of hazardous materials during construction could result in the accidental release of small quantities of hazardous materials typically associated with minor spills or leaks. However, as discussed in impact criterion “a”, hazardous materials would be stored, managed, and used in accordance with applicable regulations. Personnel would be required to follow Health and Safety Plans, including instructions on health and safety precautions and procedures to follow in the event of a release of hazardous materials. Equipment and hazardous materials storage areas would be routinely inspected for leaks. Inspection records would be maintained onsite to document compliance with the management of hazardous materials requirements. For the previously described reasons, the project construction impacts would be less than significant.

Operation

Less Than Significant Impact. The project would not create a significant hazard to the public or environment due to an accidental release of a hazardous material. As described above in criterion “a” the project would include the use and storage of diesel fuel for the operation, and testing and maintenance of the backup generators. Additionally, minor amounts of hazardous materials would be stored and used for maintenance of on-site equipment. All hazardous materials would be used and stored in accordance with federal, state, and local requirements. Project specific HMBP and SPCC plans would be completed for the safe storage and use of chemicals during operation of the Project. The SPCC would include the listed spill prevention measures outlined in criterion “a”. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. With the above listed safety features and precautions, project operational impacts would be less than significant.

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

Construction

No Impact. There are no schools located or proposed within 0.25 mile of the project site. In addition, no acutely hazardous materials, hazardous substances or hazardous waste would be used during project demolition or construction activities, and there are no hazardous materials that would be emitted from the site during construction or demolition at rates capable of creating offsite impacts. Therefore, there would be no impact.

Operation

No Impact. There are no schools located or proposed within 0.25 mile of the project site and no acutely hazardous materials would be used during project operation. Therefore, no impact from routine maintenance or operation would occur.

d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Construction

Less Than Significant with Mitigation Incorporated. According to the EBI Phase I ESA and a review of the Envirostor and GeoTracker databases (DayZenLLC 2023e; SWRCB 2024, and DTSC 2024) the project site does not have any known cases on the hazardous materials databases compiled pursuant to Government Code section 65962.5. EBI's Phase I ESA and a review of the Geotracker database identified previous groundwater contamination in the project area, consisting primarily of VOCs, at several adjacent and nearby properties that are located upgradient or cross gradient from the project site. Several of these sites have land use covenants and deed restrictions that disallow the use of groundwater; these sites likely still have remnant underlying groundwater contamination (DayZenLLC 2023e, SWRCB 2024). Groundwater depths in the project area are shallow with depth to groundwater ranging from approximately 3 to 12 feet bgs (DayZenLLC 2023e, SWRCB 2024). The shallow groundwater and the project site's downgradient to cross gradient location from sites with likely groundwater contamination indicates that there is a potential that groundwater contamination consisting of chlorinated volatile organic compounds, including 1,1-dichloroethane (1,1-DCA) and 1,1-dichloroethene (1,1-DCE), may have migrated to the project site. Additionally, the project area was formerly used for agricultural purposes and residual agricultural chemical contamination may exist in the project site's underlying soils. Therefore, ground-disturbing construction activities, such as excavation, trenching, and grading, could possibly result in the release of residual agricultural chemicals.

Construction activities could result in the exposure of construction workers to hazardous materials.

Demolition activities for the project would include ground disturbing activities for removal of existing below ground structures such as utilities and building structure foundations. Ground disturbing activities associated with construction would include site grading and excavation for construction of concrete foundations and structural steel framing, fencing, installation of underground utilities, including conduit and electrical cabling to interconnect the generators to the buildings, and placement and securing of the generators. These ground disturbing activities associated with demolition and construction of the project would have the potential to encounter unidentified or remnant pesticide contaminated soil or VOC contaminated groundwater that would require specialized handling and disposal.

The applicant proposed several measures to reduce potential impacts associated with contaminated soil. The applicant proposed measure PD HAZ-1.1 would require the preparation of a Site Management Plan (SMP) to guide activities during demolition, excavation, and initial construction to ensure that potentially contaminated soils are identified, characterized, removed, and disposed of properly. PD HAZ-1.2 would require the preparation of a Health and Safety Plan (HSP) by contractors and subcontractors to properly inform and train onsite workers of potential health and safety issues. Staff evaluated the applicant proposed measures in the context of the potential impacts and concludes that PD HAZ-1.1 is sufficient for the soil contamination. However, PD HAZ-1.1 doesn't cover potentially contaminated ground water. Therefore, mitigation measure **HAZ-2** was identified requiring the preparation of a SMP to establish proper procedures to be taken to identify contaminated soil and/or groundwater, measures to be taken when contaminated soil and/or groundwater is encountered, and how to dispose of the contaminated soil and/or groundwater properly. Staff concurs that applicant proposed measure PD HAZ-1.2 would adequately protect workers from contaminated soil and/or groundwater. Therefore, mitigation measure **HAZ-3** was identified to ensure compliance of the applicant proposed measure. Staff concludes that with implementation of **HAZ-2** and **HAZ-3**, impacts to the public or the environment due to contaminated soils, would be reduced to a less than significant level.

Operation

No Impact. Operation and maintenance activities would not involve excavation activities. Therefore, there would be no impact related to the presence nearby listed hazardous material sites.

- 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?**

Construction

Less Than Significant Impact. The Hayward Executive Airport is located approximately 1.7 miles northeast of the project site and is located within the airport's ALUCP influence area. However, the project site is not located within the Hayward Executive Airport ALUCP noise or safety compatibility zones. Workers at the project site would not be exposed to excessive aviation noise. The project site is within a FAR Part 77 Surface zone for the airport and would be required to notify the FAA under Part 77 and receive a "Determination of No Hazard" prior to project approval. On January 2, 2025, following the project applicant's submission of Form 7460-1 for project structures ranging from 30 to 115 feet AGL, several "Determinations of No Hazard to Air Navigation" were received from the FAA (DayZen 2024n). Further discussion of the project's requirements as related to the FAA can be found in **Section 5.17 Transportation**.

Compliance with this federal requirement would reduce any potential aviation hazard impacts to less than significant. Therefore, the project would result in less than significant impacts related to aviation safety hazard or excessive aviation noise for people residing or working in the project area. Additionally, project construction would not result in excessive noise impacts for people residing or working in the project area, as described in a more detailed analysis in **Section 5.13 Noise**.

Operation

Less Than Significant Impact. Operation and maintenance activities for the project site would be similar to those for a similarly sized industrial building and would not have an impact on people working or residing in the area. As noted above the applicant received several "Determinations of No Hazards to Air Navigation" from the FAA (DayZen 2024n). In addition, the thermal plume generated by the project would not be large enough to pose a safety hazard to any aircraft near the Hayward Executive Airport. Detailed analysis of potential thermal plume impacts is contained in **Section 5.17 Transportation**. Therefore, there would be a less than significant impact.

f. Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Construction

No Impact. A review of the Alameda County *Emergency Operations Plan* for the project revealed no specific mapping or delineation of emergency evacuation or access routes. The plan identified that the area police, fire department, and other emergency services would implement their emergency response or evacuation plans according to their communications protocols and hazard mitigation programs. The project site is not identified on any emergency evacuation or access routes. During construction of the project, in the event that land closures are needed they would be temporary in nature and roadways would not be blocked such that emergency vehicles would be unable to

access the site or surrounding properties. During project construction, there would be no impact to an adopted response plan or emergency evacuation plan.

Operation

No Impact. After construction, no lane closures would be needed, and no impact to a response plan or emergency evacuation plan would occur.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Construction

No Impact. The project site is located in an urban part of Alameda County within an LRA. It is located within an un-zoned Fire Hazard Severity Zone, within a LRA, indicating that the project site has a less than moderate susceptibility to wildland fires. It is not located within a FRA or SRA, nor is it mapped within a LRA VHFSZ. The project site is in a fully urbanized area and is not adjacent to wildlands. Industrial and commercial buildings bound the project to the west, east, north, and south. Although equipment and vehicles used during construction, as well as welding activities, have the potential to ignite dry vegetation, the project is located within an urban area surrounded by industrial and commercial zones that have irrigated landscaping and very limited dry vegetation. In the event of construction triggered fire at the project site, it would be served by the Hayward Fire Department. Therefore, there would be no impact from wildland fires resulting from construction activities related to the project.

Operation

No Impact. The project site is located within a LRA that is not located within or near any wildlands. The project site would be served by the Hayward Fire Department in the event of project related or other local fires. As discussed for construction, there would be no impact from wildland fires.

5.9.3 Mitigation Measures

HAZ-1: Prior to issuance of demolition permits, a lead-based paint (LBP) visual inspection and pre-demolition survey, including sampling and testing of suspect materials, shall be conducted of on-site buildings to determine the presence of LBP. The survey shall be conducted by a contractor with a Lead Related Construction certification issued by the California Department of Public Health. The findings of the LBP survey shall be submitted to the Hayward Fire Department for review.

HAZ-2: Prior to issuance of demolition or grading permits, the project applicant shall prepare a Site Management Plan (SMP) to guide activities during demolition, excavation, and initial construction to ensure that potentially contaminated soils and groundwater are identified, characterized, removed, and disposed of properly. The

purpose of the SMP is to establish appropriate management practices for handling impacted soil or other materials that may be encountered during construction activities. The SMP shall be reviewed and approved by the Hayward Fire Department and the Alameda County Department of Environmental Health prior to any work on the site, including prior to soil and groundwater sampling.

The SMP shall be implemented during project demolition and construction and shall include, but shall not be limited to, the following components:

- A detailed discussion of the site background, current conditions of on-site soil, groundwater and soil gas;
- Description of soil and groundwater testing to verify the presence or absence of remnant or unknown soil or groundwater contamination. The testing shall include (but not be limited to) the collection and analyses of soil samples for agricultural chemicals, including organochlorine pesticides, and collection and analysis of groundwater samples for volatile organic compounds (VOCs) and any other contaminants identified in previous environmental studies in the vicinity of the project. This soil and groundwater characterization shall be performed via testing prior to initiation of project demolition or construction.
- Protocols for sampling of soil and groundwater to facilitate the profiling of the soil and groundwater for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during demolition and construction and potential exposure of contaminated soil or groundwater to future users of the site prior to project construction.
- Procedures to be undertaken in the event that contamination is identified applicable screening levels or previously unknown contamination is discovered prior to or during project demolition or construction.
- Notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction;
- Onsite soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
- Sampling and laboratory analyses from a certified environmental laboratory of excess soil requiring disposal at an appropriate off-site waste disposal facility;
- Procedures and protocols for the safe storage, stockpiling, and disposal of contaminated soils; and
- Protocols to manage groundwater, including segregation or treatment of contaminated groundwater, if necessary, that may be encountered during trenching or subsurface excavation activities.

If there are no contaminants identified on the project site that exceed applicable screening levels for construction workers and residential users published by the Regional Water Quality Control Board (RWQCB), California Department of Toxic

Substances Control (DTSC), or Cal EPA, the SMP and testing results do not need to be submitted to an oversight agency and instead only need to be submitted to the Alameda County Department of Environmental Health (ACDEH), and the Hayward Fire Department (HFD) for approval prior to issuance of a grading permit and prior to conducting any demolition activities.

If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant shall obtain regulatory oversight from appropriate regulatory agency (HFD, DTSC, ACDEH or SWRCB). The SMP and planned remedial measures shall be reviewed and approved by the ACDEH, HFD, DTSC, and/or SWRCB, as appropriate to the contaminated media. A copy of the SMP shall be submitted to the Director or Director's designee with the ACDEH and the Hayward Fire Department. Copies of the approved SMP shall be kept at the project site.

Any contaminated soils and/or groundwater identified by testing conducted in compliance with the SMP and found in concentrations above established thresholds shall be removed and disposed of according to HWCL under the oversight of applicable regulatory agency. Contaminated soil excavated and contaminated groundwater extracted from the site shall be transported off-site and disposed of at a permitted disposal facility.

HAZ-3: All contractors and subcontractors at the project site shall develop a Health and Safety Plan (HSP) specific to their scope of work and based upon the known environmental conditions for the site prior to project construction. The HSP shall be prepared by an industrial hygienist. The HSP shall be approved by the Director of the Department of Development Services or the Director's designee and implemented under the direction of a Site Safety and Health Officer. The HSP shall include, but shall not be limited to, the following elements, as applicable:

- A description of potential health and safety hazards;
- A description of applicable regulations and standards to be implemented for the project site;
- Provisions for personal protection and monitoring exposure to construction workers;
- Education for workers in the proper use of personnel protection;
- Provisions for Hazard Communication Standard (HAZCOM) worker training and education including information about HAZCOM labeling, copies of
- Safety Data Sheets for any hazardous materials that may be used onsite;
- Identification of workers, supervisor, and employer health and safety responsibilities; and
- A description of emergency procedures and identification of responsible personnel to contact in event of an emergency. Include contact information for responsible personnel and other emergency contact numbers.

Copies of the approved HSPs shall be kept at the project site.

5.9.4 References

- Alameda County ALUC 2012 – Alameda County Land Use Commission (Alameda County ALUC). Hayward Executive Airport Airport Land Use Compatibility Plan (ALUCP). Accessed online at:
<https://www.acgov.org/cda/planning/generalplans/airportlandplans.htm>
- Alameda County 2012 – Alameda County Sheriff's Office of Homeland Security and emergency services (Alameda County). Alameda County Emergency Operations Plan. Accessed online at:
<https://www.acgov.org/ready/documents/EmergencyOperationsPlan.pdf>
- CAL FIRE 2025 – California Department of Forestry and Fire Protection (CAL FIRE). *Alameda County FHSZ Map in Local Responsibility Area*. Accessed on: January 30, 2025. Accessed at: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-1/fhszl_map1.pdf
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023e – DayZenLLC. (TN 252253). STACK SVY03A– SPPE Application – Appendix F, Part V of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023j – DayZenLLC. (TN 254550-1). STACK SVY03A–STACK Responses to CEC Data Request Set 2, Part I, dated February 16, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024a – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024n – DayZenLLC (TN 260703). STACK SVY03A Final FAA NODs - SVY03A, dated December 18, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DTSC 2024 – Department of Toxic Substances Control (DTSC). Envirostor Database. Accessed November 2024. Accessed online at:
<https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=hayward%2C+ca>
- Hayward 2025 – City of Hayward Local Resilience Plan 2021 Update. Accessed online at: <https://www.hayward->

ca.gov/sites/default/files/fire/Hayward%20LRP%202021%20Update_%20Final%20033123_.pdf

SWRCB 2024 – State Water Resources Control Board (SWRCB). GeoTracker Database. Accessed November 2024. Accessed online at:
<https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=hayward%2C+ca>

5.10 Hydrology and Water Quality

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to hydrology and water quality.

HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 impervious surfaces in a manner which would:				
i. result in substantial erosion or siltation, on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G

5.10.1 Environmental Setting

The proposed SVY03A Data Center Campus (SVY03A Campus) would provide 76.6 MW of backup emergency power generation. The SVY03A Campus would include a new three-story data center building (SVY03A), a security building (SVY03B), backup generators to support the SVY03A data center, an on-site project substation, and a Pacific Gas & Electric (PG&E) switching station, and an onsite transmission line. The SVY03A Campus would also include new site and infrastructure improvements consisting of new access driveways located at Eden Landing Road and Production

Avenue, internal circulation improvements, parking, a loading dock, stormwater basins, landscaping, utilities, a water storage tank, and a perimeter security fence. The SVY03A Campus would be in the city of Hayward at 26062 Eden Landing Road. (DayZenLLC 2023a)

Storm Drainage and Water Quality

The project site is located within the Mount Eden Creek Watershed, which includes a network of underground storm drains in an industrial part of Hayward that discharges into Mount Eden Creek. The project site is currently developed as the Eden Landing Business Park and consists of nine existing one-story buildings with a total combined square footage of 167,471 square feet (sq.ft.). Approximately 87 percent (428,000 sq.ft.) of the site is composed of impervious surfaces and the remaining 13 percent (64,000 sq.ft.) is composed of pervious surfaces. The site is served by an existing 30-inch storm drain on Investment Boulevard and an 18-inch storm drain on Production Ave.

Groundwater

The city of Hayward is in the Santa Clara Valley Groundwater Basin. The project site is within the East Bay Plain Subbasin. The East Bay Plain Subbasin is bounded by the San Francisco Bay in the north and the west, the Hayward Fault Zone to the east and the Nile Cones Subbasin to the south. The city of Hayward acts as the Groundwater Sustainability Agency (GSA) for the portion of the East Bay Plain Subbasin that includes the project site.

Based on the Preliminary Geotechnical Report prepared for the project site, groundwater was encountered at a depth of approximately eight to nine feet below ground surface (bgs). Fluctuations in groundwater levels may occur due to seasonal changes such as variations in rainfall or underground flow patterns, etc.. Due to the proximity of the San Francisco Bay, the direction of groundwater flow may be tidally influenced, however the presumed predominant direction of groundwater flow on-site is to the southwest. (DayZenLLC 2023d)

Flooding

FEMA has designated the project site and the surrounding vicinity as Zone X, Area of Minimal Flood Hazard. Zone X encompasses areas determined to be outside the 500-year flood and protected by levee from the 100-year flood. (FEMA 2009)

The project site is also not within an area mapped as vulnerable to sea level rise in the National Oceanic and Atmospheric Administration's Digital Coast, Sea Level Rise Viewer (NOAA).

The project site would not be subject to inundation due to local dam failure. (DWR 2024)

Seiches, Tsunamis, and Mudflow Hazards

The project area is located outside the hazard area representing the maximum considered tsunami runup (CEMA 2009).

There are no lakes or other bodies of water within the project vicinity that would be subject to seiches. The San Francisco Bay could potentially experience a seiche, as it is partially bound by land. However, because the project site is approximately two miles away from the San Francisco Bay, it is unlikely the project would risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

Regulatory Background

Federal

Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The State Water Resources Control Board (SWRCB) and its nine affiliated Regional Water Quality Control Boards (RWQCBs) are responsible for the regulation and enforcement of the water quality protection requirements of the federal Clean Water Act (CWA) and the State's Porter-Cologne Water Quality Control Act (Porter-Cologne). The National Pollutant Discharge Elimination System (NPDES) is the permitting program that allows point source dischargers to comply with the CWA and Porter-Cologne laws. This regulatory framework protects the beneficial uses of the state's surface and groundwater resources for public benefit and environmental protection. Protection of water quality could be achieved by ensuring the proposed project complies with applicable NPDES permits from the SWRCB or the San Francisco Bay RWQCB. (RWQCB 2022).

Under Section 303(d) of the CWA, States are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern. TMDL is the quantity of a pollutant that can be assimilated by a water body without violating water quality standards.

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and

redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flow controlled reservoir, or, in a catchment that drains to channels that are tidally influenced; or (3) the project is located in a catchment or sub-watershed that is highly developed (i.e., that is 70 percent or more impervious).

Provision C.12.f of the MRP requires co-permittee agencies to implement a control program for PCBs that reduces PCB loads by a specified amount during the term of the permit, thereby making substantial progress toward achieving the urban runoff PCBs waste load allocation in the Basin Plan by March 2030. Programs must include focused implementation of PCB control measures, such as source control, treatment control, and pollution prevention strategies. Municipalities throughout the Bay Area are updating their demolition permit processes to incorporate the management of PCBs in demolition building materials to ensure PCBs are not discharged to storm drains during demolition. Buildings constructed between 1950 and 1980 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit. Single-family residential and wood frame structures are exempt.

Federal Emergency Management Agency Flood Insurance Program. The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood (or 100-year flood), which is also referred to as the base flood.

State

Statewide Construction General Permit. The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional and filed with the RWQCB by the project sponsor prior to commencement of construction. The SWPPP includes best management practices (BMPs) to minimize storm water erosion and prevent water pollution. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk.

State Sustainable Groundwater Management Act. The 2014 Sustainable Groundwater Management Act (SGMA) requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or alternatives to GSPs. GSPs are detailed road maps for how groundwater basins would be managed to reach long-term sustainability.

In January 2022, the city of Hayward City Council adopted a Groundwater Sustainability Plan (GSP) for the East Bay Plain (EBP) Subbasin. The EBP Subbasin GSP creates the framework for sustainable management of groundwater in the EBP Subbasin. The GSP was jointly prepared by two Groundwater Sustainability Agencies (GSAs), the city of Hayward and the East Bay Municipal Utility District (EBMUD) which are the two water providers that lie atop the subbasin. The GSP meets the regulatory requirements listed in California Code of Regulations Title 23, Section 354 (Groundwater Sustainability Plans, Plan Contents).

Local

City of Hayward 2040 General Plan. The Hayward 2040 General Plan (General Plan) includes goals, policies, and implementation programs that will guide future growth and development in the city. The following policies are specific to hydrology and water quality and are applicable to the proposed project. (Hayward 2014).

POLICIES	DESCRIPTION
NR-6.6	Stormwater Management. The City shall promote stormwater management techniques that minimize surface water runoff and impervious ground surfaces in public and private developments, including requiring the use of Low Impact Development (LID) techniques to best manage stormwater through conservation, onsite filtration, and water recycling.
NR-6.8	NPDES Permit Compliance. The City shall continue to comply with the San Francisco Bay Region National Pollutant Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit.
NR-6.9	Water Conservation. The City shall require water customers to actively conserve water year-round, and especially during drought years.
HAZ-3.2	Development in Floodplains. The City shall implement Federal, State, and local requirements related to new construction in flood plain areas to ensure that future flood risks to life and property are minimized.
PFS-4.11	Industrial Pretreatment. The City shall enforce appropriate industrial pretreatment standards and source control to prevent materials prohibited by Federal and State regulations from entering the wastewater system and to ensure compliance with the City's local discharge limits. The City shall work with the business community to maintain and implement programs to ensure compliance with all Federal, State and local discharge requirements.

POLICIES	DESCRIPTION
PFS-5.1	Accommodate New and Existing Development. The City shall work with the Alameda County Flood Control and Water Conservation District to expand and maintain major stormwater drainage facilities to accommodate the needs of existing and planned development.
PFS-5.6	The City shall impose appropriate conditions on grading projects performed during the rainy season to ensure that silt is not conveyed to storm drainage systems.

City of Hayward Stormwater Management and Urban Runoff Control Ordinance.

The City's Stormwater Management and Urban Runoff Control Ordinance (Article 11.5 of the Hayward Municipal Code) is intended to protect and enhance the water quality of watercourses, water bodies, and wetlands in a manner pursuant and consistent with the Clean Water Act and the current MRP NPDES Permit. The ordinance requires projects to implement stormwater treatment measures to reduce water quality impacts of urban runoff and to implement the City's Construction Best Management Practices (BMPs).

5.10.2 Environmental Impacts

Environmental impacts evaluated in this section include the construction and operation elements of the proposed project.

a. Would the project violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact with Mitigation Incorporated Construction activities (e.g., grading and excavation) on the project site may result in temporary impacts to surface water quality. Since the proposed project would disturb more than one (1) acre of land it would be subject to construction-related stormwater permit requirements of California's NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) administered by the SWRCB. Prior to any ground-disturbing construction activity, the applicant must comply with the Construction General Permit, which includes the preparation of a construction Stormwater Pollution Prevention Plan (SWPPP). By implementing the stormwater management BMPs included in the construction SWPPP, redevelopment of the site would not cause substantial degradation in the quality, or an increase in the rate or volume of stormwater runoff from the site during construction.

All development projects within the city of Hayward are required to comply with the City's Municipal Stormwater Management and Urban Runoff Control Ordinance. This

ordinance requires that all projects include construction best management practices (BMPs) to prevent stormwater pollution.

The applicant proposed a project design measure (PD HYD 1.1) that was evaluated by staff and included as mitigation measure HYD-1 to reduce potential impacts to water quality and protect surface and groundwater quality. The mitigation measure proposes best management practices that would typically be included in the SWPPP; therefore, the project would not be expected to violate water quality standards or waste discharge requirements during construction, and impacts would be less than significant.

Project site improvements would include an approximately six percent decrease in impervious surfaces compared to existing conditions. The project would be regulated under Provision C.3 of the MRP and would include 18,000 square feet of bioretention basins designed to meet on-site runoff treatment requirements and ensure that stormwater discharge rates and durations during project operations do not exceed existing conditions. Downspouts for the roof drainage would be piped under sidewalks and discharged to the bioretention areas. Bioretention areas would include perforated underdrains and overflow structures that connect to the on-site storm drains system, discharging to the 30-inch public stormwater pipe under Investment Blvd.

In addition, the project features include the use of drought-tolerant and water-conserving landscape materials. Implementation of these measures reduce the rate of stormwater runoff while also removing pollutants.

These measures address water quality standards and waste discharge requirements and assure stormwater discharge from the site would not substantially degrade surface water or groundwater quality.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. Although the city of Hayward does not use groundwater as a regular water supply, groundwater wells are maintained that are critical to the city's ability to provide water services in the event of an earthquake or other water supply emergency. Given that the project site is currently developed almost entirely with impervious surface areas (buildings and parking), the project site is not considered an important groundwater recharge zone. The proposed project would result in a six percent increase of pervious surface area on-site, thereby slightly increasing the opportunity for groundwater recharge.

The project would connect to the existing municipal water system and does not propose to draw groundwater on-site. The project would require three feet of excavation for a slab foundation and approximately 20 feet of excavation for aggregate piers. Given that

groundwater is located approximately eight to nine feet bgs on-site, temporary dewatering may be required.

If dewatering is necessary, and the discharge is found to be contaminated, the project owner would likely be required to obtain coverage under the VOC and Fuel General Permit (San Francisco RWQCB General Order No. R2-2017-0048 NPDES Permit No. CAG912002). Discharge of uncontaminated water from the dewatering operation to waters of the US within the San Francisco RWQCB's jurisdiction is a permitted activity under the Construction General Permit. No permanent dewatering is proposed.

For these reasons, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The project's impact on groundwater supplies or recharge during construction and operation would therefore be less than significant.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. A site specific SWPPP would be prepared in compliance with NPDES requirements and would ensure erosion or siltation impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;

Less Than Significant Impact. Surface runoff from the proposed project would be controlled as described in criterion "a" and "c (i)" above. Therefore, impacts would be less than significant.

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

Less Than Significant Impact with Mitigation Incorporated. The project would decrease pervious surfaces, therefore decreasing the amount of stormwater runoff. The Applicant would implement mitigation measure PD HYD-1 (Construction Best Management Practices) to reduce potential surface and groundwater quality impacts during construction. The applicant would install 18,000 square feet of bioretention basins designed to meet on-site runoff treatment requirements and ensure that stormwater discharge rates and durations under project operations do not exceed existing conditions on-site. For these reasons, the project would not substantially alter the existing drainage pattern of the site or area.

iv. Impede or redirect flood flows?

Less Than Significant Impact. The proposed project would discharge to existing drainage structures and would not increase the potential of site runoff to impede downstream flood flows. Therefore, no net change would be expected from the proposed project and the impacts would be less than significant.

d. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The approximately 11.3-acre project site is located on two contiguous parcels bounded by Eden Landing Road on the north, Production Avenue on the east, and Investment Boulevard on the south, and a developed parcel on the west. The project site is not located in a tsunami or seiche hazard zone. FEMA has designated the project site as Zone X, Area of Minimal Flood Hazard, meaning the site is outside of the 500-year flood and protected by levee from 100- year flood. As the project site is not in close proximity to any bodies of water, it would not be subject to inundation due to local dam failure and would not be subjected to seiche action. Therefore, the project would not risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

e. Would the project conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The city of Hayward jointly prepared a GSA under the GSP. Implementation of mitigation measure PD HYD-1 and on-site bioretention basins would assure project consistency with the City's Stormwater Management and Urban Runoff Control Ordinance and minimize potential water quality impacts. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan.

5.10.3 Mitigation Measures

HYD-1: Construction Best Management Practices. The project would be required to implement the following construction BMPs as part of the SWPPP prepared for the project to ensure construction-related water quality impacts are less than significant.

- Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: 1) start of the rainy season; 2) site dewatering activities; or 3) street washing activities; and 4) saw cutting asphalt or concrete, or to retain any debris or dirt flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding. Dispose of filter particles in the trash.
- Create a contained and covered area on the site for the storage of bags of cement, paints, flammables, oils, fertilizers, pesticides or any other materials used on the

project site that have the potential for being discharged to the storm drain system through being windblown or in the event of a material spill.

- Never clean machinery, tools, brushes, etc., or rinse containers into a street, gutter, storm drain or stream. See "Building Maintenance/Remodeling" flyer for more information.
- Ensure that concrete/gunite supply trucks or concrete/plaster finishing operations do not discharge wash water into street gutters or drains.
- The applicant/developer shall immediately report any soil or water contamination noticed during construction to the City Fire Department Hazardous Materials Division, the Alameda County Department of Health and the Regional Water Quality Control Board.
- No site grading shall occur during the rainy season, between October 15 and April 15, unless approved erosion control measures are in place.
- Non-storm water discharges to the City storm sewer system are prohibited. Prohibited discharges include but are not limited to the following: polluted cooling water, chlorinated or chloraminated swimming pool water, hazardous or toxic chemicals, grease, animal wastes, detergents, solvents, pesticides, herbicides, fertilizers, and dirt. All discharges of material other than storm water must comply with a NPDES Permit issued for the discharge other than NPDES Permit No. CAS612008.

5.10.4 References

- CEMA 2009 – California Department of Conservation. California Tsunami Maps and Data. Accessed August 21, 2023. Accessed online at: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/
- DWR 2024 – California Department of Water Resources (DWR). Dam Breach Inundation Map Web Publisher. Accessed online at: https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2
- RWQCB 2022 – Regional Water Quality Control Board San Francisco Region. Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008. May 11, 2022.
- SWRCB 2019 – State Water Resources Control Board, Geotracker portal. Accessed on: April 2, 2024. Accessed online at: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/?extent=-13660824.1095%2C4512285.6761%2C-3543416.8341%2C4564415.7294%2C102100&utm_source=cgs+active&utm_content=alameda
- ACFD 2023 – Alameda County Flood Control & Water Conservation District. Interactive Map: Alameda County Watersheds. Accessed August 21, 2023. Accessed online at: <https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds>

- Hayward 2014 – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. 2014. Accessed by applicant. Accessed online at:
<https://www.hayward-ca.gov/your-government/documents/planning-documents>
- EBMUD 2018 – East Bay Municipal Utility District and the City of Hayward. East Bay Plain Subbasin Sustainable Groundwater Management – Draft Stakeholder Communication and Engagement Plan. February 2018. Accessed online at:
https://www.haywardca.gov/sites/default/files/Draft%20C%26E%20Plan_022718.pdf
- FEMA 2009 – Federal Emergency Management Agency. Flood Rate Insurance Map 06001C0288G. Effective August 3, 2009. Accessed online at:
<https://www.fema.gov/glossary/zone-c-or-xunshaded#:~:text=Area%20of%20minimal%20flood%20hazard,or%20designation%20as%20base%20floodplain.>
- NOAA 2024 – National Oceanic and Atmospheric Administration (NOAA). Digital Coast, Sea Level Rise Viewer. Last modified March 12, 2024. Accessed online at:
<https://coast.noaa.gov/slr/#/layer/slr/10/-13581756.874679431/4498150.719796521/13/satellite/none/0.8/2050/interHigh/midAccretion.>
- DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023d – DayZenLLC (TN 252252). STACK SVY03A – SPPE Application – Appendices C - E, Part IV of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

5.11 Land Use and Planning

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to land use and planning.

LAND USE PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.11.1 Environmental Setting

The proposed project site is in the City of Hayward, in Alameda County, at 26203 Production Avenue. The project site consists of two contiguous parcels comprising approximately 11.3 acres, currently occupied by a business park which would be demolished for development of the project (DayZenLLC 2023a; DayZen 2024b). The project site is in an urban area surrounded by commercial and industrial development, and there is no nearby agricultural or forest land. The Hayward Executive Airport is located approximately 1.8 miles north of the site.

Regulatory Background

Federal

Code of Federal Regulations (CFR), Title 14, Part 77.9(b). These regulations provide requirements for when an applicant must notify the Federal Aviation Administration (FAA) for any proposed construction of new structures near an airport.

State

State Planning and Zoning Law (Government Code section 65000 et seq.) provides the primary state legal framework that cities and counties must follow in land use planning and controls. Also, Airport Land Use Commissions (ALUCs) are established in State Aeronautics Act (Public Utilities Code, section 21661.5, section 21670 et seq., and Government Code section 65302.3 et seq.).

Local

City of Hayward General Plan. The project site has a General Plan land use designation of "Industrial Technology and Innovation Corridor", or IC, under the

Hayward 2040 General Plan (General Plan) (COH 2024a). The General Plan includes policies related to land use that apply to the project, discussed later in this section (COH 2024b).

City of Hayward Zoning Code. The City of Hayward zoning designation for the project site is “Industrial Park”, or IP (COH 2024a). The City of Hayward Zoning Code (Zoning Code) includes development standards and allowed uses for parcels in the Industrial Park zoning district, discussed later in this section (COH 2024c).

Airport Land Use Compatibility Plan, Hayward Executive Airport. The Alameda County Airport Land Use Commission (ALUC) adopted the Airport Land Use Compatibility Plan (ALUCP) for the Hayward Executive Airport in 2012. The purpose of the ALUCP is to encourage compatibility between the airport and its surrounding land uses (Alameda County ALUC 2012). The project site is located approximately 1.8 miles south of Hayward Executive Airport within the Airport Influence Area (AIA), meaning that the ALUCP’s policies would apply to the project (Alameda County ALUC 2012, Figure 3-1). The project site is not located within any of the Airport Safety Zones defined in the ALUCP (Alameda County ALUC 2012, Figure 3-4).

5.11.2 Environmental Impacts

a. Would the project physically divide an established community?

Construction and Operation

No Impact. The project would occupy two contiguous parcels of approximately 11.3 acres (DayZenLLC 2023a; DayZen 2024b). The site is currently developed with a business park and does not serve as a link between communities. The site is surrounded by other similar commercial and industrial uses. If any lane closures would be required during construction, the City of Hayward would ensure adequate access to neighboring properties with traffic control measures. Roadways, sidewalks, or bikeways would not be permanently obstructed, and operation and maintenance of the project would occur fully on site. Therefore, project construction and operation would not prevent pedestrian, bike, or vehicular movement between different areas of the community, and no impact would occur.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Construction and Operation

Less Than Significant Impact. As discussed in the subsections that follow, construction and operation of the project would not conflict with land use plans or policies such that significant environmental impacts would occur. Impacts would be less than significant.

City of Hayward General Plan. The project site is in an area with the General Plan land use designation of IC (COH 2024a). The City of Hayward states that this land use designation is for building types which include “warehouses, office buildings, research and development facilities, manufacturing plants, business parks, and corporate campus buildings...The corridor is expected to grow as an economic and employment center and evolve to achieve a healthy balance of traditional manufacturing and information- and technology-based ones” (COH 2024b). The proposed project would be consistent with the description of uses allowed in areas with this land use designation, and it would not involve uses that could cause unmitigated hazards or nuisance impacts. (**Sections 5.3 Air Quality, 5.9 Hazards and Hazardous Materials, and 5.17 Transportation** of this document evaluate the proposed project’s potential effects relating to hazards and nuisance effects.)

The General Plan’s maximum floor-area-ratio (FAR) for the IC land use designation is 0.8 (COH 2024b). FAR is a tool for local governments to predict and limit the intensity of land uses and their resulting environmental impacts. The FAR of a development is the total floor area of a building or buildings on a lot divided by the total lot area. A project with a higher than allowed FAR could impact the visual character of an area, or be correlated with more employees and visitors which could result in environmental impacts related to increased vehicle miles travelled, or VMT. The project’s floor area would be approximately 310,460 square feet (DayZen 2024b). The project site is approximately 11.37 acres (COH 2024d), or approximately 495,277.2 square feet. Using these values, staff calculated the proposed FAR as approximately 0.63, which is below the maximum FAR of 0.8 for properties designated as IC in the General Plan. Therefore, no conflict with the FAR regulation would occur.

City of Hayward Zoning Code. The City of Hayward zoning designation for the project site is Industrial Park, or IP (COH 2024a). According to the Zoning Code, this zoning designation is “intended to provide areas for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere” (COH 2024c). Section 10-1.3510 of the Zoning Code defines “office” uses to include data processing centers and computer, technical, and informational services, which is consistent with the proposed project. Office uses are permitted in the IP zoning district, per Section 10-1.1603 of the Zoning Code (COH 2024c). Therefore, the proposed data center use is consistent with the uses allowed in the IP zoning district.

The Zoning Code also includes development standards which apply to the project site. According to City of Hayward staff, Investment Boulevard is considered the front of the property due to the proposed building facing that direction (CEC 2025a). Because the proposed project’s building facade would exceed 100 feet in length, and the height of the building would exceed 20 feet in height, the applicable front yard setback would be 20 feet from Investment Boulevard (DayZen 2024a; COH 2024c). Production Avenue and Eden Landing Road are both considered side street frontages, so the proposed buildings on these sides must be set back a minimum of 10 feet from the street. The

project's structures meet these required minimum setbacks, according to the proposed site plans (DayZen 2024a).

The Industrial Park zoning district limits the height of buildings to a maximum of 75 feet, although a project's building height may be increased through a Major Site Plan Review approval from the City of Hayward if the City finds that the additional height would result in a more beneficial site layout or in public benefits/amenities that could not otherwise be achieved (Section 10-1.1604, COH 2024c). The proposed project, with heights varying from 94 feet to the top of the main structure, 100 feet to the top of the building parapet, and 108 feet to the top of the small penthouse, would exceed the maximum height of 75 feet and would require a Major Site Plan Review (DayZen 2024b).

According to Section 10-1.3076 of the City of Hayward Zoning Code: "Major site plan review ensures that new and redeveloped large-scale development will achieve General Plan and other City goals, policies and regulations; that circulation components will interconnect with the overall street, bicycle, and pedestrian network of the district; that the development will incorporate sustainability elements; and that the overall site, building, landscaping, circulation and architectural design of the buildings will make a positive contribution to the neighborhood and City" (COH 2024c). The City of Hayward Planning Commission would perform the Major Site Plan Review and would need to make the findings specified in Section 10-1.3081 of the Zoning Code to approve the additional height. Included in the required findings is a determination that the project is consistent with the General Plan, Zoning Ordinance, and Design Guidelines. The findings must also determine that the project site is suitable for the type and intensity of development proposed, and that the proposed development is compatible with surrounding land uses, with no substantial adverse effects to surrounding land uses (COH 2024c). The proposed project is consistent with the uses allowed in the General Plan and Zoning Ordinance and is similar in character and form to nearby development. The project would also be consistent with the City of Hayward's Design Guidelines. (See **Section 5.1 Aesthetics** of this document for more information on the City's Design Guidelines.) Staff understands that the applicant has been meeting with the City of Hayward to discuss a community benefits package to address the height exceedance, and that discussions are ongoing. With approval of the Major Site Plan Review application by the Planning Commission, the proposed project would be consistent with the uses and development standards in the Zoning Ordinance.

Airport Land Use Compatibility Plan, Hayward Executive Airport. As discussed earlier, the project is within the Hayward Executive Airport's AIA. The project is within an area defined by the ALUCP as Zone 7, which is "Other Airport Environs outside of Zones 1-6, but within the AIA". Residential and nonresidential development in Zone 7 is generally unrestricted, given that Zone 7 is not located within any airport safety zones. Some nonresidential uses involving large concentrations of people, such as assembly rooms, or uses that could create hazards to aircraft, such as power plants, are classified as conditional land uses in Zone 7. These uses must be reviewed by the ALUC to ensure

compatibility with the airport (Alameda County ALUC 2012). The project is not one of these types of nonresidential uses. Although the project involves generators providing a backup power supply to the data center, it is not a traditional power plant, and the generators' thermal plumes would not be large or frequent enough to pose a safety hazard to any aircraft near the Hayward Executive Airport. (Detailed analysis of potential thermal plume impacts is contained in **Section 5.17 Transportation**.) Therefore, the proposed project does not need ALUC review.

Section 3.3.3.5 of the ALUCP states that "Proponents of a project that may exceed the elevation of a Part 77 surface must notify the FAA as required by FAR Part 77, Subpart B, by the State Aeronautics Act, and by Public Utilities Code sections 21658 and 21659" (Alameda County ALUC 2012). Consistent with this, according to 14 CFR Part 77.9(b)(1) of the Code of Federal Regulations, for a project located within 20,000 feet of the nearest runway of an airport with a runway more than 3,200 feet in length, the FAA must be notified of a proposed project that would exceed an imaginary surface extending outward and upward at a slope of 1 foot in height for every 100 feet of horizontal distance (FAA 2024).

The project site is approximately 9,600 feet from the nearest point of a runway at Hayward Executive Airport, resulting in proposed site development exceeding 96 feet in height requiring FAA notification pursuant to 14 CFR part 77.9(b)(1). The proposed project has heights varying between 94 feet to the top of the main structure, 100 feet to the top of the building parapet, and 108 feet to the top of the small penthouse. Therefore, the project would require FAA review through submittal of Form 7460-1, Notice of Proposed Construction or Alteration. The applicant submitted Form 7460-1 to the FAA and obtained a Determination of No Hazard from the FAA for the project structures on January 2, 2024 (DayZen 2024n). The City of Hayward, through its permit review process, would ensure that the applicant complies with the determinations and conditions imposed by the FAA. (See **Section 5.17 Transportation** for more discussion of FAA notification.)

For the above reasons, the proposed project would not cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

5.11.3 Mitigation Measures

None required.

5.11.4 References

Alameda County ALUC 2012 – Alameda County Airport Land Use Commission. Hayward Executive Airport - Airport Land Use Compatibility Plan, adopted August 2012. Accessed on August 28, 2024. Accessed online at: <https://www.acgov.org/cda/planning/generalplans/airportlandplans.htm>

- CEC 2025a – California Energy Commission (TN 261974). Report of Conversation, dated February 25, 2025. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- COH 2024a – City of Hayward (COH). Hayward Web Map. Accessed on July 15, 2024. Accessed online at: <https://webmap.hayward-ca.gov/?loc=-13588507,4530849,12&lyrs=HaywardParcelBaseMap|layer0:33>
- COH 2024b – City of Hayward (COH). Hayward 2040 General Plan. Industrial Land Use Designations. Accessed on July 15, 2024. Accessed online at:
<https://www.hayward2040generalplan.com/land-use/industrial>
- COH 2024c – City of Hayward (COH). City of Hayward Municipal Code. Section 10-1.1602 B. Industrial Park. Accessed on July 15, 2024. Accessed online at:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART1ZOOR_S10-1.1600INDI
- COH 2024d – City of Hayward (COH). City of Hayward Maps and GIS. Accessed on September 10, 2024. Accessed online at: <https://www.hayward-ca.gov/discover/maps>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024a – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024b – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024n – DayZenLLC (TN 260703). STACK SVY03A Final FAA NODs - SVY03A, dated December 18, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- FAA 2024 – Federal Aviation Administration. Title 14, Chapter 1, Subchapter E, Part 77, Subpart B “Notice Requirements”. Accessed online at:
<https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77/subpart-B>

5.12 Mineral Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to mineral resources.

MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.12.1 Environmental Setting

Information on mineral resources was compiled from published literature, maps, and review of aerial photographs. Impacts to mineral resources from project construction and operational activities were evaluated qualitatively based on the area occupied by the project, site conditions, expected construction practices, anticipated materials used, and the locations and duration of project construction and operational activities.

The project site, located in the city of Hayward within Alameda County, is in Mineral Resource Zone 1 (MRZ-1) for aggregate materials by the State of California (DOC 2015). MRZ-1 refers to an area where available geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood for their presence exists (DOC 2015). The project site and surrounding area are not known to support significant mineral resources of any type.

According to the city of Hayward 2040 General Plan (Hayward 2014), the only designated mineral resource sector of regional significance within the city of Hayward was the La Vista Quarry. The La Vista Quarry was located east of Mission Boulevard and Tennyson Road, about 3.6 miles east of the project site and ceased operation prior to 2008 due to depletion of the accessible aggregate resource. The La Vista Quarry has since been redeveloped with residential and parkland uses.

The California Department of Conservation, Division of Mine Reclamation lists seven sites on the current Assembly Bill 3098 Purchase Preference (AB 3098) list. Public Contracts Code section 10295.5 restricts the purchase of sand, gravel, aggregate, and other mined materials by State agencies to those surface mining operations on the AB 3098 list. Three additional sites are shown on the Division of Mine Reclamation Mines

Online (MOL) interactive map. Of these ten sites mapped in Alameda County, the closest is the Mission Clay Products Quarry (91-01-0014) located about 10 miles southeast of the project site in the city of Fremont. The Mission Clay Products Quarry is not on the current AB 3098 list. (DOC 2016)

According to the United States Geological Survey (USGS) Mineral Resources Online Spatial Data interactive map, halite (salt) has been produced from evaporation beds as close as approximately 1.25 miles northwest and about 0.75 miles southeast of the project site in the marshlands adjacent the San Francisco Bay. (USGS 2011)

Regulatory Background

Federal

No federal regulations related to mineral resources apply to the project.

State

Surface Mining and Reclamation Act. SMARA requires that the State Geologist classify land into MRZ or Scientific Zones according to the known or inferred mineral potential of the land (Pub. Resources Code, §§ 2710-2796).

MRZs are defined as the following (DOC 2015):

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood for their presence exists.
- MRZ-2: Areas where adequate information indicates that significant deposits are present, or where it is judged that a high likelihood for their presence exists. The guidelines set forth two requirements to be used to determine if land should be classified MRZ-2:
 - The deposit must be composed of material that is suitable as a marketable commodity.
 - The deposit must meet threshold value. The projected value (gross selling price) of the deposit, based on the value of the first marketable product, must be at least \$5 million (1978 dollars).
- MRZ-3: Areas containing mineral deposits, but their significance cannot be evaluated from available data.
- MRZ-4: Areas where available information is inadequate for assignment to any other MRZ category.

Scientific Zones are defined as areas containing unique or rare occurrence of rocks, minerals, or fossils that are of outstanding scientific significance.

Local

City of Hayward General Plan. Staff reviewed the City of Hayward 2040 General Plan (Hayward 2014) for provisions relevant to mineral resources applicable to the project. The Natural Resource Element, which establishes goals and policies to protect and enhance the natural resources within the Hayward Planning Area. These goals and policies address a variety of topics, including biological resources, air quality and greenhouse gas reduction, open space, energy resources and efficiency, mineral resources, hydrology and water quality, water conservation, paleontological resources, and scenic resources. Natural Resources Element Goal 5 identifies policies related to mineral resources.

- NR-5.1 Mineral Resource Protection. The city shall protect mineral resources in undeveloped areas that have been classified by the State Mining and Geology Board as having statewide or regional significance for possible future extraction by limiting new residential or urban uses that would be incompatible with mining and mineral extraction operations.
- NR-5.2 Mining Operations Nuisance and Hazard Abatement. The city shall require applicants for any new or expanded mining operation to demonstrate, prior to issuance of a conditional use permit, that the operation will not create significant nuisances, hazards, or adverse environmental effects on neighboring land uses.
- NR-5.3 Mining Reclamation Requirements. The city shall require mining operators to prepare reclamation plans and implement reclamation programs to restore land for alternative uses consistent with the California Surface Mining and Reclamation Act once mining operations are no longer viable.

5.12.2 Environmental Impacts

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

Construction and Operation

No Impact. The project site is in an area that does not contain any known or designated mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource.

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

Construction and Operation

No Impact. The project site is in an area that does not contain any known or designated mineral resources. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site.

5.12.3 Mitigation Measures

None.

5.12.4 References

- DOC 2015 – California Department of Conservation (DOC). Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal. Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area: Classification of Aggregate Resource Areas: South San Francisco Bay Production-Consumption Region. Author: Melvin C. Stinson, Michael W. Manson and John J. Plappert (1987) Special Report 146. Accessed on: February 26, 2024. Accessed online at: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>
- DOC 2016 – California Department of Conservation (DOC). AB 3098 List. This list is updated daily. Accessed on: February 26, 2024. Accessed online at: <https://www.conservation.ca.gov/dmr>
- Hayward 2014 – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. 2014. Accessed on: February 2, 2024. Accessed online at: <https://www.hayward-ca.gov/your-government/documents/planning-documents>
- USGS 2011 – United States Geological Survey (USGS). Mineral Resources Online Spatial Data: Interactive Maps and Downloadable Data for Regional and Global Geology, Geochemistry, Geophysics, and Mineral Resources. 2011. Accessed on: October 18, 2023. Accessed online at: <https://mrdata.usgs.gov/general/map-us.html>

5.13 Noise

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to noise and vibration.

NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.13.1 Environmental Setting

The project area consists primarily of commercial and industrial land uses (DayZenLLC 2023a, Section 2.2.1). The proposed project would be located on an 11.3-acre site. It is bounded by Production Avenue and industrial/Research and Development (R&D) facilities to the northeast, and Eden Landing Road and commercial facilities to the northwest. Highway 92 is located just beyond these commercial facilities. The project site is also bordered by Investment Boulevard and industrial and commercial facilities to the southeast, and industrial manufacturing/R&D facilities to the southwest (DayZenLLC 2023a, Section 4.1.1.2).

The Hayward Executive Airport is located approximately 1.75 miles north of the project site (DayZenLLC 2023a, Section 4.1.1.2). The nearest residences are located approximately 3,300 feet to the east-northeast of the project site (DayZenLLC 2023b, Section 4.13.1.3). The predominant ambient noise sources are attributed to the automobile traffic on Highway 92 to the north and surrounding industrial-related operations/activities (DayZenLLC 2023f).

A 96-hour long-term ambient noise monitoring survey was conducted at two locations, on the project site (represented by monitoring location LT-1) and adjacent to the nearest residences (represented by monitoring location LT-2), from August 10th through August 13th, 2023 (DayZenLLC 2023b Figure 4.13-1). LT-1 is located at the southern end of the project parcel and LT-2 is located approximately 3,300 feet east-northeast of the project site, adjacent to the nearest residences. The average ambient sound levels measured at LT-1 and LT-2 were approximately 62 and 72 decibels on the A-weighted scale (dBA) L_{dn} ,¹ respectively (DayZenLLC 2023f).

In addition, short-term noise monitoring surveys were conducted at four locations around the project's property boundary on August 9th, 2023. Each survey was taken during the daytime hours at intervals of 15 minutes. Noise levels, from the surveys, ranged between 57 and 65 dBA L_{eq} ² at those locations (DayZenLLC 2023b, Section 4.13.1.3).

Regulatory Background

Thresholds of Significance

The California Environmental Quality Act (CEQA) Guidelines state that a project would be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project would substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis (environmental checklist established by CEQA Guidelines, Appendix G). CEQA does not define what noise level increase would be substantial. Generally, an increase of 3 dBA is noticeable and an increase of 5 dBA is distinct. Other factors, such as the frequency of occurrence of the noise and time of day/night it occurs are also commonly considered in determining if such an increase is clearly significant or not.

There are no adopted thresholds for an increase in dBA level to be considered a significant impact for construction activities. Noise due to construction activities are considered to be less than significant if the construction activity is temporary and the use of heavy equipment and noisy activities are limited to daytime hours. However, an increase of 10 dBA or more during the day can be perceived as noisy (triggering a community reaction) and warrant additional measures to address the noise levels. An increase of 10 dBA corresponds to a doubling of loudness or dBA level and is generally considered to be the starting point at which significant noise impacts may occur (triggering a community reaction). It is very difficult to identify the exact level of noise resulting from construction because it fluctuates based on many factors over the course of a week, day, or even hour. It also depends on other factors, such as intervening structures, land topography and land cover. For example, intervening structures block

¹ L_{dn} is day-night average sound level, which is the 24-hour average sound pressure level calculated with a 10 dBA penalty added to nighttime hours (10 P.M. to 7 A.M.).

² L_{eq} is a measurement of average energy level intensity of noise over a given period of time.

or impede sound waves, and undulating topography and land roughness would play a role in attenuating the propagation of noise waves. Therefore, performance standards (i.e., a complaint and redress process) are ultimately used as a backstop measure to address any impacts that are perceived by the community.

In September 2013, the California Department of Transportation (Caltrans) released the Transportation and Construction Vibration Guidance Manual, which includes the Federal Transit Administration's (FTA) methods and findings. The Caltrans manual states that for construction activities that generate vibration, the threshold of human response begins at a peak particle velocity (PPV) of 0.16 inch per second (in/sec). This is characterized by Caltrans as a "distinctly perceptible" event with an incident range of transient to continuous (Caltrans 2013). A level of 0.20 in/sec has been found to be unacceptable to people in buildings and can pose a risk of architectural damage to buildings.

Local

City of Hayward 2040 General Plan. The City of Hayward 2040 General Plan describes the levels of exterior noise considered compatible for various land uses (Hayward 2014). The city's exterior noise compatibility standards for various land uses are shown in **Table HAZ-1**.

TABLE HAZ-1 EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES	
Land Use Type	Highest Level of Exterior Noise Exposure that is Regarded as "Normally Acceptable" (L_{dn} or CNEL³)
Residential: Single-Family Homes, Duplex, Mobile Home	60
Residential: Townhomes and Multi-Family Apartments and Condominiums	65
Urban Residential Infill and Mixed-Use Projects	70
Lodging: Motels and Hotels	65
Schools, Libraries, Churches, Hospitals, Nursing Homes	70
Auditoriums, Concert Hall, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75
Office Buildings: Business, Commercial, and Professional	70
Industrial Manufacturing, Utilities, Agriculture	75

The City's General Plan does not establish noise limits for demolition or construction activities occurring in the city. However, General Plan policy HAZ-8.21 limits the hours

³ CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.

of construction activities to 7:00 A.M. to 7:00 P.M. Mondays through Saturdays and 10:00 A.M. to 6:00 P.M. Sundays and holidays (Hayward 2014).

City of Hayward Municipal Code. Municipal Code Chapter 4, Public Welfare, Morals and Conduct, Sections 4-1.03.1, and 4-1.03.4, set forth noise regulations applicable to commercial and industrial properties (Hayward 2024). Noise levels at any point outside of the commercial and industrial property plane are limited to 70 dBA L_{eq} (Hayward 2024, Section 4-1.03.1(b)).

Noise levels due to construction at any point outside of the project site boundaries shall not exceed 86 dBA L_{eq} (Hayward 2024, Section 4-1.03.4(b)).

5.13.2 Environmental Impacts

a. Would the project result in 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?

Construction

Less Than Significant Impact with Mitigation Incorporated. As mentioned above, the City's General Plan does not establish noise level thresholds for construction activities (Hayward 2014). However, the Municipal Code limits construction noise levels at the project boundary to 86 dBA L_{eq} (Hayward 2024, Section 4-1.03.4(b)). The City's General Plan, policy limits the hours of construction activities to 7:00 A.M. to 7:00 P.M. Mondays through Saturdays, and 10:00 A.M. to 6:00 P.M. Sundays and holidays. The project applicant proposes that all project construction activities would occur between 7:00 A.M. and 7:00 P.M. Mondays through Fridays, which would comply with the city's construction hour policy (DayZenLLC 2023b).

Demolition and construction activities would take approximately 22 months to complete and would include: demolition of the existing structures and pavement, site preparation, grading and excavation, trenching, and installation of underground telecommunication lines (DayZenLLC 2023b, Section 4.13.2.1). Demolition and construction activities would include equipment that generates noise levels that exceed ambient noise, such as excavators and dozers. Pile driving would not be used during the project's construction (DayZenLLC 2023b, Section 4.13.2.1).

Construction equipment typically produces noise levels between 76 and 85 dBA L_{eq} at 50 feet. As mentioned above, the nearest residences are approximately 3,300 feet away from the project area. At these receptors, noise levels from the loudest construction activities (85 dBA L_{eq} at 50 feet) would be 50 dBA L_{eq} . This would be below the daytime ambient noise level at these residences.

At the adjacent industrial property approximately 250 feet to the south of the project, the loudest construction activities would generate noise levels of up to 71 dBA L_{eq} (DayZenLLC 2023b, Section 4.13.1.3, Figure 14.13-1). This is lower than the City of Hayward Municipal Code's limit of 86 dBA L_{eq} at the project boundary. At this location, the ambient noise level (57 dBA L_{eq}) would increase by up to 14 dBA L_{eq} . Since this is more than 10 dBA L_{eq} , it could be perceived as noisy. However, the loudest construction activities would be intermittent and temporary.

Performance standards are ultimately used as a backstop measure to address any noise impacts that might be perceived by the community. The applicant has included the performance standards in the SPPE application (DayZenLLC 2023b, Section 4.13.2).

The project would implement the following performance standards related to construction noise:

- All project construction activities shall occur between 7:00 A.M. and 7:00 P.M. Monday through Friday pursuant to the hours and days specified in the Hayward General Plan Policy HAZ-8.21.
- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with manufacturers' recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used during project construction that are regulated for noise output by a federal, state, or local agency shall comply with such regulations.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise sensitive uses.
- Project construction speed limits shall be established and enforced during the entire construction period.

These performance standards have been adopted as mitigation measures in **Section 5.13.3** below.

Noise impacts from project construction would not be in excess of adopted environmental standards or plans. Therefore, with compliance with existing regulations and proposed Mitigation Measure NOI-1, the noise impacts from project construction activities would be less than significant.

Operation

Less Than Significant Impact. Sources of operational noise for the project would include backup gensets; roof-top heating, ventilation, and air condition (HVAC) units; and roof-

top cooling fans (DayZenLLC 2023b, Section 4.13.2.1). The gensets would be located in a generator yard adjacent to data center building (DayZenLLC 2023a, DayZen 2024b).

The City's General Plan along with the City Municipal Code Section 4-1.03 establish noise level performance standards to control noise within the city. The General Plan includes policies aimed at the potential noise impact of commercial and industrial developments near residences (Hayward 2014). The General Plan's noise level limit for residential land use is 60 dBA L_{dn} and for industrial land use is 75 dBA L_{dn} .

According to the Municipal Code, noise levels at any point outside of the commercial and industrial property plane are limited to 70 dBA L_{eq} . For a constant L_{eq} sound level, 6 dBA is added to convert that sound level to the L_{dn} sound metric. Following this principle, 70 dBA L_{eq} equates to 76 dBA L_{dn} . Therefore, because the General Plan's limit of 75 dBA L_{dn} is lower (more conservative) than the 76 dBA L_{dn} of the Municipal Code, staff uses the General Plan's noise limit to evaluate the project's operational noise levels at the adjacent commercial and industrial land uses.

The noise levels during project operation would include two modes: 1) normal, which assumes day-to-day operating conditions, including operation of all rooftops mechanical equipment at full load, without any of the gensets operating, and 2) testing, which includes testing of one genset concurrently with operation of all rooftops mechanical equipment at full load.

Noise levels during "normal" mode would not increase the average ambient sound level at the nearest residences, located 3,300 feet east-northeast of the project site. At these receptors, the noise level would be 48 dBA L_{dn} , while the average ambient sound level is 72 dBA L_{dn} . The noise level from "normal" mode at the nearest residences would also be below the City's noise level limit of 60 dBA L_{dn} . "Normal" mode of operation would have no impact on the existing ambient noise levels at the nearest residences 3,300 feet away.

At the adjacent industrial property approximately 340 feet to the southwest of the project site (most-affected by the operation of equipment during "normal" operation), noise levels during "normal" mode would be 64 dBA L_{dn} , which is below the City's noise limit of 75 dBA L_{dn} for industrial properties. However, at this location, the ambient noise level (62 dBA L_{dn}) would increase by 2 dBA L_{dn} . An increase of less than 3 dBA would not be noticeable and would have a less-than-significant impact.

Genset testing would not occur at night (DayZenLLC 2023f). Noise levels during "testing" mode would not increase the average ambient sound level at the nearest residences, located 3,300 feet east-northeast of the project site. During testing, the noise level at these residences would be 48 dBA L_{dn} , while the daytime ambient noise level is 72 dBA L_{dn} .

The adjacent industrial property located approximately 470 feet to the south-southeast of the project site would be most-affected by the operation of equipment during “testing” mode. Noise levels during “testing” mode would be 64 dBA L_{dn} which is below the City’s noise limit of 75 dBA L_{dn} for industrial properties. However, at this location, the ambient noise level (62 dBA L_{dn}) would increase by 2 dBA L_{dn} . An increase of less than 3 dBA would not be noticeable and would have a less-than-significant impact.

Humming noise, or white noise, from the operation of an industrial facility, such as a data center, is usually associated with either equipment imbalance that can occur in older or poorly designed equipment, or due to the lack of noise-control features. The project would be a new facility, incorporating low-noise equipment and noise-control features. The project is not expected to generate a humming noise or any other tonal noise discernable at the adjacent properties.

Noise impacts from project operation would not exceed adopted environmental standards or plans and would be less than significant.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Less Than Significant Impact. The equipment with the highest potential to generate significant vibration during project construction is the vibratory roller, which could be used adjacent to the property line (DayZenLLC 2023b). This analysis relies on the vibration thresholds identified by Caltrans to determine the significance of vibration impacts related to adverse human reactions. While the City does not specify a numerical threshold for vibration, the City Code (section 9.10.050) prohibits activities that generate vibration levels above the vibration perception threshold of an individual at the closest property line point to the vibration source. The threshold of human response begins at a PPV of 0.16 in/sec. Caltrans characterizes this as a “distinctly perceptible” event (Caltrans 2013). A level of 0.20 in/sec has been found to be unacceptable to people in buildings and can pose a risk of architectural damage to buildings.

Jackhammers can cause a groundborne vibration rate of 0.035 in/sec at 25 feet (less than the threshold of human response), and vibratory rollers can cause a groundborne vibration of 0.21 in/sec at 25 feet (Caltrans 2013). However, vibration rates dissipate rapidly with distance, and the vibration rate generated by a vibratory roller drops from 0.210 in/sec to 0.055 in/sec at a distance of 85 feet from the source. The nearest off-site existing buildings are approximately 115 feet from the project site (DayZenLLC 2023b). At this location, the vibration rate due to the use of a vibratory roller would be below the Caltrans PPV limit of 0.16 in/sec. Therefore, temporary vibration impacts from construction equipment are expected to be less than significant.

Operation

Less Than Significant Impact. Sources of groundborne vibration associated with project operation would include the gensets and rooftop equipment. These pieces of equipment would be well-balanced, as they are designed to produce very low vibration levels (less than the threshold of human response) throughout the life of a project. In most cases, even when there is an imbalance, they could contribute to ground vibration levels only in the vicinity of the equipment and would be dampened within a short distance. Furthermore, the gensets would be equipped with specifications that ensure sufficient exhaust silencing to reduce vibration. Therefore, vibration impacts due to project operation would be less than significant.

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?

Construction and Operation

No Impact. The nearest airport to the project site is the Hayward Executive Airport, located approximately 1.75 miles to the north. The project site is located outside the Hayward Executive Airport's and the Oakland International Airport's noise contour level of 60 dBA CNEL as defined in the Land Use Compatibility Plan for the airport (DayZenLLC 2023b). The project's operational noise levels would not exceed the 24-hour ambient noise levels at the nearest residential receptors. Since the project site is not within the noise contours for either airport, it would not result in the exposure of people residing or working in the project area to excessive noise levels.

5.13.3 Mitigation Measures

NOI-1: The project shall implement the following mitigation measures related to construction noise:

- All project construction activities shall occur between 7:00 A.M. and 7:00 P.M. Monday through Friday pursuant to the hours and days specified in the Hayward General Plan Policy HAZ-8.21.
- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with manufacturers' recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used during project construction that are regulated for noise output by a federal, state, or local agency shall comply with such regulations.
- Electrically powered equipment shall be used instead of pneumatic or internalcombustion-powered equipment, where feasible.

- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise sensitive uses.
- Project construction speed limits shall be established and enforced during the entire construction period.

5.13.4 References

- Caltrans 2013 – California Department of Transportation (Caltrans). Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol, A Guide for Measuring, Modeling, and Abating Highway Operation and Construction Noise Impacts, Division of Environmental Analysis, Environmental Engineering, September 2013. Report No. CT-HWANP-RT-13069.25.3. Accessed on May 19, 2023. Accessed online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/traffic-noise-protocol-april-2020-a11y.pdf>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Available online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023f – DayZenLLC. (TN 252254). STACK SVY03A– SPPE Application – Appendices G and H, Part VI of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024l – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- Hayward 2014 – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. Accessed on: February 27, 2025. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/Hayward-2040-General-Plan-Downloadable.pdf>
- Hayward 2024 – City of Hayward (Hayward). City of Hayward Municipal Code. Current Version: January 2024. Accessed on: March 27. Accessed online at: https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH4PUWEMOCO_ART1PUNU_NORE_S4-1.03.1NOREDE

5.14 Population and Housing

This section describes the environmental setting and regulatory background and discusses the impacts associated with the construction and operation of the project with respect to population and housing.

POPULATION AND HOUSING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.14.1 Environmental Setting

The project is proposed in the city of Hayward in Alameda County. Nearby cities include Fremont, San Leandro, and Union City. The applicant estimates the construction workers would come from the greater Bay Area. Staff considers that the local workers¹ from the greater Bay Area are not likely to temporarily (during construction) or permanently (during operations) move closer to the project. Staff considers the city of Hayward as the study area for population and housing-related impacts and the Oakland-Hayward-Berkeley Metropolitan Division² (MD), which covers Alameda and Contra Costa counties, as the setting for labor supply for the project.

Population Growth

The city of Hayward has an estimated land area of 45.3 square miles. The 2020 population for the city is 162,954 people (U.S. Census 2020).

Association of Bay Area Governments (ABAG) data is used in **Table 5.14-1** to show household growth projections between 2015 and 2050. ABAG divides the Bay Area

¹ Workers with a greater commute would be considered non-local and would tend to seek lodging closer to the project site (temporarily during construction or permanently during operations).

² A Metropolitan Division is a county or group of counties (or equivalent entities) delineated within a larger metropolitan statistical area, provided that the larger metropolitan statistical area contains a single core with a population of at least 2.5 million and other criteria are met. A Metropolitan Division consists of one or more main/secondary counties that represent an employment center or centers, plus adjacent counties associated with the main/secondary county or counties through commuting ties.

counties into sub-county areas, called superdistricts. The superdistricts are combinations of portions of cities, towns, and unincorporated areas that represent a more localized pattern of growth within the Bay Area (ABAG 2021a, page 122). The historical and projected households for the superdistricts within proximity of the project site, plus Alameda County is shown in **Table 5.14-1**. The household projections between 2015 and 2050 show a growth ranging from 33 to 54 percent or 1.0 and 1.5 percent per year in superdistricts throughout a 6-mile radius of the project site.

TABLE 5.14-1 HISTORICAL AND PROJECTED HOUSEHOLDS

Superdistrict	Area	2015	2050	Projected Household Change 2015-2050 Number	Projected Household Change 2015-2050 Percent (%)	Projected Household Change 2015-2050 Percent per Year (%)
South Alameda County	Newark, Fremont, Union City	105,000	152,000	47,000	45%	1.3%
Central Alameda County	San Leandro, Hayward	120,000	160,000	40,000	33%	1.0%
Alameda County		551,000	846,000	296,000	54%	1.5%

Source: ABAG 2021b

Housing

Table 5.14-2 presents housing supply data for the project area. Year 2024 housing estimates indicated 2,129 vacant housing units within the city of Hayward, representing a vacancy rate of 3.9 percent (CA DOF 2024).

TABLE 5.14-2 HOUSING SUPPLY ESTIMATES IN THE PROJECT AREA

Area	Housing Supply Total	Vacant	Percent Vacant
Fremont	81,348	3,142	3.9
Hayward	53,997	2,129	3.9
San Leandro	33,252	1,111	3.3
Union City	21,973	492	2.2
Alameda County	647,509	31,885	4.9

Source: CA DOF 2024

By 2040, the general plan would provide up to approximately 7,472 additional single-family dwellings, 7,399 multi-family dwelling, and an additional 2,787 jobs (Hayward 2014). The Alameda County regional housing needs assessment allocation projected a county need of 88,997 new housing units by 2031. Of the 88,997 new housing units, 4,624 new housing units would be needed in the city of Hayward (ABAGc 2013, page 24).

Labor Supply

Table 5.14-3 presents the California Employment Development Department 2020-2030 Occupational Employment Projections for the project's construction occupations in the Oakland-Hayward-Berkeley MD. The projections are estimates of the expected demand for individual occupations.

TABLE 4.14-3 PROJECTED EMPLOYMENT GROWTH			
Oakland-Hayward-Berkeley MD	Year 2020	Year 2030	Percent Change
Construction and Extraction Workers	64,580	73,380	13.6
General and Operations Managers	20,140	24,080	19.6
Security Guards	8,960	10,610	18.4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	14,200	16,140	13.7

Source: CA EDD 2023

Regulatory Background

No regulations related to population and housing apply to the project.

5.14.2 Environmental Impacts

- a. Would the project 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)?**

Construction

Less Than Significant Impact. The project would not directly or indirectly induce substantial unplanned growth in the city of Hayward. The project site is designated Industrial Technology and Innovation Corridor and the project would be consistent with the description of uses allowed in areas with this land use designation (as discussed in Section 5.11 Land Use). The project does not propose new housing and does not include any growth inducing infrastructure such as roads, water supply pipelines, or other growth inducing infrastructure. While the project includes 28 emergency backup generators, the electricity produced would directly serve the project if power interruptions occurred and would not be an extension of infrastructure that would result in indirect population growth.

Demolition, grading, excavation, and construction would last approximately 22 months. Project construction would require a construction workforce averaging 100 workers per month and a peak workforce of 150 (DayZenLLC 2023a, page 40).

The applicant anticipates the construction workforce would be recruited from the greater Bay Area (DayZenLLC 2023b). As shown in Table 4.14-3 above, there is a sufficient local construction workforce in the Oakland-Hayward-Berkeley MD to accommodate the project. Therefore, the construction workforce would not likely seek

temporary lodging closer to the project site. The project's construction workforce would not directly or indirectly induce substantial population growth in the project area and the impact would be less than significant.

Operation

Less Than Significant Impact. The project would employ approximately 45 operations workers. Based on the proximity of the supply of workers in the greater Bay Area, the project's small number operation workers are not likely to relocate closer to the project. If some operations workers were to relocate, housing data shows a vacancy rate of 4.9 percent in Alameda County and 3.9 percent in the city of Hayward. A 5-percent vacancy is a largely industry-accepted minimum benchmark for a sufficient amount of housing available for occupancy (Virginia Tech 2006). While the vacancy rate in Hayward is slightly lower than the minimum benchmark, housing counts in the project area indicate a sufficient supply of available housing units for the any operations workers that could seek housing closer to the project. Therefore, the project's operations would not directly or indirectly induce a substantial population growth in the project area. The impact would be less than significant.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Construction and Operation

No Impact. The project site is currently a developed business park consisting of nine one-story buildings. There are no housing units on the project site and, therefore, the project would not displace any people or housing and construction of replacement housing elsewhere would not be necessary. No impact would occur.

5.14.3 Mitigation Measures

None required.

5.14.4 References

- ABAG 2021a – Association of Bay Area Governments (ABAG). Plan Bay Area 2050. October 1, 2021. Accessed online at:
https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021_rev.pdf
- ABAG 2021b – Association of Bay Area Governments (ABAG). Plan Bay Area 2050 Growth Pattern. January 21, 2021. Accessed online at:
https://www.planbayarea.org/sites/default/files/FinalBlueprintRelease_December_2020_GrowthPattern_Jan2021Update.pdf
- ABAG 2021c – Association of Bay Area Governments (ABAG). Final Regional Housing Need Allocation (RHNA) Plan: San Francisco Bay Area 2023-2031, Adopted

- December 2021. Updated March 2022. Accessed online at:
https://abag.ca.gov/sites/default/files/documents/2022-04/Final_RHNA_Methodology_Report_2023-2031_March2022_Update.pdf
- CA DOF 2024 – California Department of Finance (CA DOF). E-5 Population and Housing Estimates for Cities, Counties, and the State -January 2021-2024 with 2020 Benchmark, May 2024. Accessed online at:
<https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/>
- CA EDD 2023 – Employment Development Department, State of California (CA EDD). Labor Market Information Division, 2020-2030 Occupational Employment Projections, Oakland-Hayward-Berkeley Metropolitan Division (Alameda County), data last update May 2023. Accessed online at:
<https://labormarketinfo.edd.ca.gov/data/employment-projections.html>
- Census 2020 – United States Census Bureau (Census). P1: TOTAL POPULATION - Universe: Total population, 2020 Census Summary File 1. Accessed online at:
<https://data.census.gov/cedsci/>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- Hayward 2014 – City of Hayward (Hayward). Final Environmental Impact Report City of Hayward 2040 General Plan. May 2014. Accessed online at:
https://www.hayward-ca.gov/sites/default/files/documents/Hayward%20GPU%20Final%20EIR_5-19-14_0.pdf
- Hayward 2023 – City of Hayward (Hayward). City of Hayward Housing Element. July 2023. Accessed online at: https://www.hayward-ca.gov/sites/default/files/City_of_Hayward_2023_2031_Housing%20Element_Certified.pdf
- Virginia Tech 2006 – Virginia Tech, Virginia Tech Housing Needs and Market Analysis. Thomas Jefferson PDC, Center for Housing Research Virginia Tech. October 2006. Accessed online at:
<https://mlsoc.vt.edu/research/vchr/publications/housing-needs-and-market-analysis-thomas-jefferson-pdc.html>

5.15 Public Services

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to public services.

PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Fire protection?				
ii. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.15.1 Environmental Setting

The project site is in the City of Hayward in Alameda County. The project would include a three-story data center building with approximately 310,460 square feet, backup generators to support the data center, a 1,605 square foot security building, an on-site project substation, a PG&E switching station, and an on-site transmission line. Fire and police protection services are provided to the project site from departments within the City of Hayward. Recreation facilities are provided by the Hayward Area Recreation and Park District (HARD) and other public facilities like libraries are provided by the City of Hayward. Therefore, the study area for public services-related impacts is the City of Hayward except for schools and parks because the project site is within the Hayward Unified School District and HARD boundaries respectively.

Fire Protection. The project would be located within the jurisdiction of the Hayward Fire Department (HFD). The HFD provides fire suppression and emergency medical services to the City of Hayward. The HFD is comprised of three divisions and the Special Operations Division includes the Fire Prevention and Hazardous Materials Programs. (Hayward 2023, pp. 188-189) The HFD has nine fire station stations. Station 4 is located at 27836 Loyola Avenue, approximately 1.5 miles east of the project site. (HFD 2024)

The HFD has approximately 128 firefighters and officers. In 2023, HFD had approximately 23,379 fire alarm incidents (Hayward 2023). The HFD's goal is for the first unit to respond within five minutes of dispatch 90 percent of the time and all remaining units to respond within 8 minutes of dispatch (Hayward 2014, p. 3-115). The California Department of Forestry and Fire Protection Service (CAL FIRE) maps for Alameda County indicate the project is in an area of local responsibility (CAL FIRE 2008).

Police Protection. Police protection would be provided by the Hayward Police Department (HPD). The HPD is located at 300 West Winton Avenue, approximately 2.4 miles northeast of the project site. The HPD has 154 police officers (Hayward 2023, p. 198). The HPD is comprised of five divisions and the Patrol Division is comprised of seven patrol teams that respond to emergency and non-emergency calls from the community (HPD 2024). The goal of HPD is to respond to Priority 1 calls within five minutes of dispatch 90 percent of the time (Hayward 2014). In 2023, HPD received 8,134 property crime calls, 1,652 violent crime calls, and 18 arson calls (Hayward 2023, p. 196).

Schools. The project would be located within the Hayward Unified School District. The district serves students from preschool through high school (HUSDa 2024). The Hayward Unified School District had an enrollment of 20,193 students in the 2023/2024 school year (CDE 2024). The Hayward Unified School District is composed of 3 high schools, 5 middle schools, 19 elementary schools, 1 alternative high school, 1 adult education center, and 1 childcare center for preschoolers (HUSDa 2024). In the Hayward Unified School District, the nearest schools to the project site are Lorin Eden Elementary School, approximately one mile east of the project, and Anthony Ochoa Middle School, approximately one mile northeast of the project. A private school, the California Crosspoint Academy, is the closest school to the project and is located approximately 0.7 mile north of the project site.

Parks. The Hayward Area of Recreation and Park District (HARD) is an independent special use district that provides park and recreation services for the City of Hayward and the unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview (HARD 2024a). HARD includes 95 parks, playfields, and facilities covering approximately 1100 acres. HARD has seven community centers, two senior centers, two nature centers, three aquatic centers, a theater, three historic properties and greenways and trails (HARD 2024b).

The City of Hayward's goal is to provide 2 acres of local parks per 1,000 residents, 2 acres of school parks per 1,000 residents, 3 acres of regional parks per 1,000 residents, 1 mile of trails and linear parks per 1,000 residents, and 5 acres of parks per 1,000 residents district wide (Hayward 2014). **Table 5.14-1 in Section 5.14 Population and Housing** provides a population estimate of 162,954 for the City of Hayward. The City of Hayward has a total of 1,052.6 acres park land. With a total of 133.2 acres of local parks, Hayward has approximately 0.82 acres per 1,000 population and does not

meet its park standard for local parkland. With a total of 20 acres of school recreation sites, Hayward has approximately 0.12 acres per 1,000 population and does not meet its school parks standard. Hayward has 63.6 acres of community parks, 232.4 acres of special use, and 603.3 acres of linear parks, greenways, and trails (Hayward 2019).

Rancho Arroyo Park and Mount Eden Park are the closest parks to the project site, located approximately one mile northeast and one mile east respectively. Rancho Arroyo Park has a playground, basketball, open lawn area, and barbeques and picnic tables. Mount Eden Park has a playground, horse-shoe courts, shuffleboard, soccer fields, baseball/softball fields, tennis courts, and restrooms (HARD 2024c). HARD maintains these parks (HARD 2024d).

Other Public Facilities. The Hayward Public Library has two branches to serve the City of Hayward. The City's closest library to the project site is the Weekes Branch Library, which is located approximately 2.2 miles east (HCL 2024).

Regulatory Background

No regulations related to public services apply to the project.

5.15.2 Environmental Impacts

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

Construction

Less Than Significant Impact. The project site is developed with nine one-story buildings and is already serviced by HFD. The project site has a land use designation of Industrial and Innovation Corridor and the site is surrounded by industrial and commercial uses.

Project construction activities that could pose a risk for fire or the need for fire protection response due to heated exhaust or sparks, include the use of grader, cranes, saws, excavation equipment, and vehicles. Other construction activities with a potential fire risk due to heat sources or open flames could include the use of torches or welding.

While there may be a slight increased need for fire protection response during project construction, these effects would not be sufficient to induce the construction of new or

physically altered governmental facilities that could result in significant environmental impacts. Therefore, impacts would be less than significant.

Operation

No Impact. The project would employ an estimated 45 operations workers. Based on the proximity of the supply of workers in the greater Bay Area, operation workers are not likely to relocate closer to the project. The few operations employees that may move into Hayward and within HFD's service area would have a negligible effect on the ability of the existing fire stations to meet their emergency service and response standards.

The project site is currently developed and serviced by the HFD. The HFD would continue to service the project site and the project would not increase the demand for fire services and would not require new or physically altered fire protection facilities. The project would include 28 generators in two locations on the project site. Of which, 24 of the generators would be in a stacked configuration with a diesel fuel tank at the base (DayZenLLC 2023a pg. 9). The fuel tanks would be double-walled and equipped with leak detection systems. Diesel fuel deliveries would occur as needed via tanker trucks. An emergency pump shut-off would be used if a pump hose breaks while fueling the tanks (DayZenLLC 2023a pg. 19-20). Emergency access to the site would be provided from the proposed driveways on Eden Landing Road and Production Avenue. (DayZenLLC 2023 pg 236). The project would be required to submit of a Fire Protection Engineer Report to demonstrate compliance with the Fire Code. With all the above elements, there would be no impact to the fire protection service.

ii. Police Protection?

Construction

Less Than Significant Impact. The construction workforce would be drawn from the greater Bay Area and is not expected to relocate closer to the project site. If some workers were to temporarily relocate closer to the project, it would not increase the demand for emergency response services, including police protection.

While there may be a slight increase in the need for police protection services during construction of the project, the increase would not significantly affect the average response times for the police department. The project would not induce construction of new or physically altered governmental facilities, such as police stations that could result in significant environmental impacts. Therefore, there would be no impact on police protection service.

Operation

No Impact. The project would not increase the demand for police services. Based on the proximity of the available workforce, the project's 45 operation workers are not likely to relocate closer to the project. However, if some operation workers were to

relocate, it would have a negligible effect on the ability of the HPD to meet its emergency service and response standards.

The project site is currently developed and serviced by the HPD. The HPD would continue to service the project site and the project would not increase the demand for police services and would not require the construction of new or physically altered police facilities. The project site would be secured by perimeter fencing and would include a security gate and security building with security personnel. The project would include new lighting for security purposes, including outdoor lighting of driveways and walkways. The fencing and on-site security would deter criminal activity during operation. The project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered police service facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts would be less than significant.

iii. Schools?

Construction

No Impact. The project would be located within the Hayward Unified School District. The construction workforce would be drawn from the greater Bay Area and likely would not temporarily relocate closer to the project site. However, if some workers were to temporarily relocate closer to the project, they would typically not bring their families with them. The project would not increase the need for school facilities or have an effect on service ratios to the extent that new or physically altered school facilities would be necessary. Therefore, no impact would result from construction.

Operation

No Impact. District Board Policy (BP 7211 Facilities: Developer Fees) allows the Board of Trustees to establish, levy, and collect developer fees on residential, commercial, and industrial construction within the district. Government Code section 65995 expressly provides that “[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995... are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in governmental organization... on the provision of adequate school facilities.” (Gov. Code, § 65995 (h).) The current school impact fee for the district is \$0.78 per square foot of covered, enclosed commercial/industrial space (HUSD 2024b). Based on the proposed size of the two buildings (combined total of 312,065 sq. ft.), an estimated \$243,410 would be assessed. These fees would be collected at the time the applicant applies for building permits from the City of Hayward.

Given the proximity to the available workforce to the project and the project’s small operational workforce, operation workers are not likely to permanently relocate to the

project site. However, if some of the 45 operational workers were to permanently relocate closer to the project, it would not increase the need for schools or affect service ratios to the extent that new or physically altered school facilities would be necessary. As no new physically or altered school facilities would be needed, no impact would result from operation.

iv. Parks?

Construction

No Impact. Construction of the project would require an average 100 workers and a peak of 150 workers. The construction workforce would be drawn from the greater Bay Area and would not require an influx of new workers. Also, construction workers who may temporarily relocate closer to the project do not typically visit area parks or park facilities while working in the project area and tend to return to their primary residence for the weekends. Construction of the project would not affect park standards or increase the demand for park facilities. Project construction would have no impact on parks, trails, or park facilities.

Operation

No Impact. The project would employ approximately 45 operations workers and given the proximity to the available workforce; they are not likely to relocate closer to the project. If some operations workers were to relocate, the few new residents would have a negligible increase on the usage of or demand for parks, trails, or other recreational facilities. The project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered park facilities in order to maintain acceptable service ratios or other performance objectives. There would be no impact on parks, trails, or park facilities during operation.

v. Other Public Facilities?

Construction

No Impact. The construction workforce would be drawn from the greater Bay Area and workers would not likely relocate closer to the project site. However, if some construction workers were to temporarily relocate, they are not likely to visit public facilities such as public libraries as they are working while in the project area and tend to return to their primary residence for the weekends. There would be no impacts to public facilities during project construction.

Operation

No Impact. The project would not generate substantial population growth in the project area that would result in the need for additional public facilities or services for new residents. The project would have an estimated 45 operations employees and this small number employees would have a negligible increase in the usage of or demand for the

surrounding libraries or public facilities. The project operations would not require new or physically altered public facilities and, therefore, there would be no impact.

5.15.3 Mitigation Measures

None required.

5.15.4 References

- Cal Fire 2008 – California Department of Forestry and Fire Protection Service (Cal Fire). Alameda County FHSZ Map in Local Responsibility Area. September 2008. Accessed on: May 2024. Accessed online at: <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps>
- CDE 2023 – California Department of Education (CDE). California Department of Education Educational Demographics Unit, Data Quest, Select District Level Data for the year 2022 - 2023, Enrollment by Ethnicity and Grade, Hayward Unified Report (01-61192). Accessed online at: <https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=0161192&agglevel=district&year=2023-24>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- HARD 2024a – Hayward Area Recreation and Park District (HARD). Hayward Area Recreation and Park District website – About us. Accessed on April 2024. Accessed online at: <https://www.haywardrec.org/27/About-Us>
- HARD 2024b – Hayward Area Recreation and Park District (HARD). Hayward Area Recreation and Park District website – Park & Recreation Master Plan. Accessed on April 2024. Accessed online at: <https://www.haywardrec.org/1850/Park-Recreation-Master-Plan-Update>
- HARD 2024c – Hayward Area Recreation and Park District (HARD). Hayward Area Recreation and Park District website – Picnic and Outdoor Venues. Accessed on April 2024. Accessed online at: <https://www.haywardrec.org/202/Picnic-and-Outdoor-Venues>
- HARD 2024d – Hayward Area Recreation and Park District (HARD). Hayward Area Recreation and Park District website – Park and Facility Maintenance. Accessed on April 2024. Accessed online at: <https://www.haywardrec.org/2013/Park-and-Facility-Maintenance>

Hayward 2023 – City of Hayward (Hayward). Adopted Operating Budget Fiscal Year 2023. Accessed on April 2024. Accessed online at: <https://www.hayward-ca.gov/your-government/documents/budget-documents>

Hayward 2019 – City of Hayward (Hayward). Parks Development Impact Fee Nexus Study. November 2019. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/park-impact-fee-nexus-study.pdf>

Hayward 2014 – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. July 2014. Accessed online at: https://www.hayward-ca.gov/sites/default/files/Hayward_2040_General_Plan_FINAL.pdf

HFD 2024 – Hayward Fire Department (HFD). Hayward Fire Department website – Stations. Accessed on April 2024. Accessed online at: <https://www.hayward-ca.gov/fire-department/stations>

HPD 2024 – Hayward Police Department (HPD). Hayward Police Department website – Divisions. Accessed on April 2023. Accessed online at: <https://www.hayward-ca.gov/police-department/divisions>

HPL 2024 – Hayward Public Library (HPL). Hayward Library website. Accessed on April 2024. Accessed online at: <https://www.hayward-ca.gov/public-library>

HUSD 2024a – Hayward Unified School District (HUSD). Hayward Unified School District website. Accessed on April 2024. Accessed online at: <https://www.husd.us/>

HUSD 2024b – Hayward Unified School District (HUSD). Hayward Unified School District website – Developed Fees. Accessed on April 2024. Accessed online at: <https://www.husd.us/community/developer-fees>

5.16 Recreation

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to recreation.

RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.16.1 Environmental Setting

The project is in the City of Hayward in Alameda County. The project would include a three-story data center building, backup generators to support the data center, a security building, an on-site project substation, a PG&E switching station and an on-site transmission line.

Staff considers nearby recreation facilities within the City of Hayward as the project study area for recreation impacts. This is consistent with staff's experience that local workers from the greater Bay Area are not likely to relocate temporarily or permanently closer to the project site (see **Section 5.14 Population and Housing**) and thus, not add new users to the City's recreation facilities.

Recreation Facilities

The Hayward Area Recreation and Park District (HARD) is an independent special use district created to provide park and recreation services for the City of Hayward and the unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview. HARD's boundaries encompass a 100 square-mile area and 309,000 residents. The park system includes 110 sites covering approximately 1,369 acres (HARD 2024a). The closest parks to the project site are Rancho Arroyo Park and Mt. Eden Park. The Rancho Arroyo Park is located approximately one mile northeast of the project and the Mount Eden Park is located approximately one mile east of the project. Rancho Arroyo Park features include a playground, basketball, picnic tables and barbecues. Mt. Eden Park features include a playground, horseshoe court, tennis, soccer, baseball/softball,

shuffleboard, picnic tables and barbeques, and restrooms. Both parks are maintained by HARD (HARD 2024b).

Regulatory Background

No regulations related to recreation apply to the project.

5.16.2 Environmental Impacts

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?

Construction

No Impact. Construction of the project would require an average 100 workers and a peak of 150 workers. Construction is expected to last for approximately 22 months (DayZenLLC 2023b). The applicant estimates that the construction workforce would come from the greater Bay Area, thus the workforce would likely be drawn from the Oakland-Hayward-Berkeley region.¹ Based on the proximity of the available workforce to the project, construction workers from neighboring cities and counties are not likely to temporarily relocate closer to the project site or visit the nearby parks. Thus, the project would not increase the use of or accelerate the physical deterioration of parks or other recreational facilities. Therefore, the project would have no impact on the surrounding parks and recreational facilities.

Operation

No Impact. The project would employ approximately 45 operations workers. Based on the proximity of available labor in the greater Bay Area, the project's small number of operation employees would likely reside within commuting distance of the project and are not likely to relocate closer to the project. However, if some operation workers were to move closer to the project, they would not be in numbers where the use of existing parks or recreational facilities would be increased to the extent that substantial physical deterioration of the park or facility would result. There would be no impact to surrounding parks and recreational facilities.

¹ Region in this instance is the Metropolitan Division. A Metropolitan Division is a county or group of counties (or equivalent entities) delineated within a larger metropolitan statistical area, provided that the larger metropolitan statistical area contains a single core with a population of at least 2.5 million and other criteria are met. A Metropolitan Division consists of one or more main/secondary counties that represent an employment center or centers, plus adjacent counties associated with the main/secondary county or counties through commuting ties.

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?

Construction

No Impact. Recreational facilities are not included as part of the project, nor would the project require the construction or expansion of recreational facilities. The construction needs of the project would be supplied by the existing workforce in the greater Bay Area and would not require an influx of new workers. Construction workers would commute to the project during the 22 months of construction and are not likely to temporarily relocate closer to the project. Therefore, the project would have no impact on recreational facilities.

Operation

No Impact. Operation of the project would require approximately 45 employees. If some operation workers were to move closer to the project site, they would not be in numbers that would require the construction or expansion of recreational facilities. Therefore, the project would have no impact on recreational facilities and would not require the construction or expansion of recreational facilities to accommodate the project.

5.16.3 Mitigation Measures

None required.

5.16.4 References

DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

HARD 2024a – Hayward Area Recreation and Park District (HARD). Hayward Area Recreation & Park District website About Us. Accessed March 2024. Accessed online at: <https://www.haywardrec.org/27/About-Us>

HARD 2024b - Hayward Area Recreation and Park District (HARD). Hayward Area Recreation & Park District website Facilities. Accessed March 2024. Accessed online at: <https://www.haywardrec.org/Facilities>

5.17 Transportation

This section describes the environmental setting and regulatory background of the project with respect to transportation and discusses transportation impacts associated with construction and operation of the project.

TRANSPORTATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G

5.17.1 Environmental Setting

The 11.3 acre project site is at 26203 Production Avenue in Hayward, California. The site is currently developed with an approximately 167,471 square-foot office park consisting of nine one-story buildings surrounded by paved surface parking which would all be demolished as part of the project.

Regional access to the project site is provided by Interstate 880 (I-880) and State Route 92 (SR 92), the latter with an interchange located within 500 feet of the site. Local access is available via Clawiter Road to the north, which directly connects to SR 92, as well as Eden Landing Road, Production Avenue, and Investment Boulevard, all of which border the project. The west side of the site is adjacent to a parking lot serving a neighboring property.

Transportation infrastructure on Clawiter Road, Eden Landing Road, Production Avenue, and Investment Boulevard within one block of the project site is limited to one travel lane in each direction. Pedestrian sidewalks are provided on the north side of Eden Landing Road, opposite the project site; none are provided on the south side of Eden Landing Road or either side of Production Avenue or Investment Boulevard. All intersections within a quarter-mile of the site, south of SR 92, are stop-controlled. A Class II bicycle lane is provided in either direction of Eden Landing Road; this bicycle lane terminates at the San Francisco Bay Trail approximately 0.4 miles southwest of the project site. The San Francisco Bay Trail offers access to the Hayward Shoreline Recreational Area to the north, the Eden Landing Ecological Reserve to the south, and

bikeway connections to surrounding Bay Area jurisdictions and coastal recreational bike paths in both directions. Clawiter Road is a designated truck route.

Public transit service in the project area includes local bus transport provided by AC Transit, though there are no bus stops within walking distance (0.5 miles of the project site). The nearest bus stop actively served by transit is located at the intersection of Industrial Blvd and the SR 92 freeway entrance, approximately one-mile northeast of the project site. Route 86 provides service with 30-minute headways from Hayward BART Station in the northeast to Tennyson Road to the southeast, via the Hayward Executive Airport and west Hayward (AC Transit 2024). Three bus stops are located in the project vicinity but service to these stops was discontinued. One stop is located in the northbound direction on Eden Landing Road, approximately 55 feet west of the southeast corner of the Eden Landing Road and Clawiter Road intersection and provides a bench and shelter. The other two stops are located on each side of Investment Boulevard, about 50 feet east of the intersection with Production Avenue; both are flagpole stops located in the planter strip, lacking bus pads or other amenities.

The closest airport to the project site is the Hayward Executive Airport, located approximately 1.75 miles (9,290-feet) northeast of the project site. The nearest runway is located approximately 2 miles north of the project site and exceeds 3,200 feet in length (Alameda County 2012).

Regulatory Background

Federal

Code of Federal Regulations (Title 14, Part 77.9 [a]). This regulation requires Federal Aviation Administration (FAA) notification for construction or alterations within 20,000 feet of an airport with a runway more than 3,200 feet in length if the height of the construction or alteration exceeds a slope of 100 to 1 extending outward and upward from the nearest point of the nearest runway of the airport (CFR 2023a). Hayward Executive Airport runway 10R/28L is 5,694 feet in length and located approximately 1.75 miles from the project site.

The threshold for the FAA notification 100 to 1 surface exceedance height is approximately 92 feet above ground level (AGL) at the project site. If a project's height, including any temporary equipment (such as cranes used during construction) or any ancillary structures (such as transmission poles), exceeds the 100 to 1 surface, the project applicant must submit a copy of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA.

The project site plan indicates the small penthouse on the roof top of the data center building would extend the maximum building height to 108 feet (DayZenLLC 2024I). The project applicant must file FAA Form 7460-1 to comply with federal requirements and commits to do so if required in accordance with federal regulations (DayZenLLC 2024j). In addition, within five days after construction reaches its greatest height, the

project applicant must submit a copy of FAA Form 7460-2, Notice of Actual Construction or Alteration, to the FAA.

State

California Department of Transportation. Project construction activities that require movement of oversized or excessive load vehicles on state roadways require a transportation permit issued by the California Department of Transportation under Vehicle Code, section 35780 (CA Veh Code 1992). Caltrans may also require the applicant to prepare a Transportation Management Plan prior to construction to reduce effects on the state transportation network (Caltrans 2019).

Local

Alameda County Airport Land Use Commission's Land Use Compatibility Plan for the Hayward Executive Airport. Figure 3-5 of the Alameda County Airport Land Use Commission's Comprehensive Land Use Plan (CLUP) identifies the Federal Aviation Regulations (FAR) Part 77 surfaces above the project site. FAR Part 77 surfaces are those identified by the FAA as obstruction surfaces around an airport. Exceedance of these surfaces could result in obstruction of airspace and hazards to aircraft entering or exiting the Hayward Executive Airport. At the project site, the FAR Part 77 surface shown on Figure 3-5 of the CLUP is at 202 feet above mean sea level (AMSL) (Alameda County 2012). The project site surface is approximately between 13 and 20 feet above MSL. Therefore, according to Figure 3-5 of the CLUP, any structure greater than 182 feet above in height AGL may pose a safety hazard.

According to CLUP Table 3-2 Safety Compatibility Criteria, power plants are considered a conditional use in Zone 7 of the airport vicinity. According to Figure 3-4, the project is located within the AIA but outside all designated zones; zone 7 is not designated on the figure. According to the CLUP, power plants should generally be avoided within the AIA. Given the different types of power plants and wide range of characteristics, however, they should be evaluated on a case-by-case basis, in consultation with local agencies and in accordance with FAA criteria and the policies outlined in the CLUP.

Looking Forward 2040 Hayward General Plan. The Looking Forward 2040 Hayward General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to transportation and are applicable to the proposed project (Hayward 2014):

- Policy M-1.4 Multimodal System Extensions: The City shall require all new development that proposes or is required to construct or extend streets to development a transportation network that complements and contributes to the city's multimodal system, maximizes connections, and minimizes barriers to connectivity.

- Policy M-1.7 Eliminate Gaps: The City shall strive to create a more comprehensive multimodal transportation system by eliminating “gaps” in roadways, bikeways, and pedestrian networks, increasing transit access in underserved areas, and removing natural and manmade barriers to accessibility and connectivity.
- Policy M-2.5 Regional Traffic Impacts: The City shall review and comment on development applications in Alameda County and adjoining cities which may impact Hayward's transportation systems, and shall suggest solutions to reduce negative effects on local circulation and mobility.
- Policy M-3.7 Development Review: The City shall consider the needs of all transportation users in the review of development proposal to ensure on-site and off-site transportation facility improvements complement existing and planned land uses.
- Policy M-3.8 Connections with New Development: The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways, pedestrian ways, and transit facilities.
- Policy M-4.5 Emergency Access: The City shall develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.
- Policy M-6.5 Connections Between New Development and Bikeways: The City shall encourage that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways and do not interfere with existing and proposed bicycle facilities.
- Policy M-7.9 Development Impacts on Transit: The City shall require developers of large projects to identify and address, as feasible, the potential impacts of their projects on AC Transit ridership and bus operations as part of the project review and approval process.
- Policy M-8.2 Citywide TDM Plan: The City shall maintain and implement a citywide Travel Demand Management program, which provides a menu of strategies and programs for developers and employers to reduce single-occupant vehicle travel in the city.
- Policy M-8.3 Employer-based Strategies: The City shall encourage employers to participate in TDM programs (e.g., guaranteed ride home, subsidized transit passes, carpool and vanpool programs) and to participate in or create Transportation Management Associations to reduce parking needs and vehicular travel.
- Policy M-11.2 Designated Truck Routes: The City shall require trucks to use designated routes and shall prohibit trucks on local streets to address traffic operations and safety concerns in residential neighborhoods.

City of Hayward, Bicycle Master Plan Update 2020. The City of Hayward adopted an update to its Bicycle & Pedestrian Master Plan (BPMP) in 2020, which details the City's plan to establish a network of accessible, safe, and integrated bicycle and

pedestrian facilities. This plan suggests improvements through policy, program, and project recommendations. The following bikeways are recommended in the vicinity of the project site (Hayward 2020a):

- Class IV separated bikeway along Clawiter Road, between SR92 and Eden Landing Road
- Class II buffered bicycle lane along Clawiter Road, between Eden Landing Road and Arden Road. This improvement has been implemented for two blocks from Eden Landing Road to Investment Boulevard.

Recommendations were also made for the pedestrian network along Clawiter Road, which has been identified as a potential pedestrian collector. The following improvements were proposed for Clawiter Road:

- ADA Curb Ramps
- High-Visibility Crosswalks
- Midblock RRFBs
- Curb Extensions
- Signal Improvements

The plan does not suggest any improvements for streets bordering the project site.

City of Hayward, Transportation Impact Analysis Guidelines. The City of Hayward Transportation Impact Analysis (TIA) Guidelines outlines the requirements for evaluating transportation impacts under the California Environmental Quality Act (CEQA) using the Vehicle Miles Traveled (VMT) methodology. The guide establishes the environmental checklist, screening criteria, adopted thresholds of significance, and methodologies of analysis to be used in transportation impact analysis.

With respect to VMT analyses under CEQA, the guide establishes the following requirements that are applicable to the proposed project (Hayward 2020b):

- Evaluating VMT. The project will have a less than significant impact if the project VMT is equal to or less than the existing regional average VMT per employee. Additionally, the policy states that projects that are presumed to have a less than significant impact per state guidance and will not require a VMT analysis should the following criterion, among other possible criteria, be met:
 - Small Projects (generating 110 daily trips or less)

Projects that do not meet the above VMT threshold and/or small project requirement are required to evaluate and disclose potential VMT environmental impacts with the established threshold criteria outlined in the City's TIA guidelines. This includes providing VMT mitigation measures, where feasible. Pre-approved mitigation measures consist of land use strategies, parking management, neighborhood enhancements,

transit strategies, and transportation demand (TDM) measures. If TDM measures are proposed as a mitigation measure, the project must include a TDM plan that demonstrates how it will provide monitoring and reporting, compliance, and funding for the project life.

5.17.2 Environmental Impacts

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction

Less Than Significant Impact. Project construction would not significantly obstruct any transit, roadway, bicycle, or pedestrian facilities in the area. Construction activities would occur mostly on-site and not in the public right-of-way, with the exception of plans to construct a sidewalk along the project frontage on Eden Landing Road, Production Avenue, and Investment Boulevard. Detailed plans for the project construction associated are not yet available, but final design would include a construction plan to comply with local ordinances. Construction may require temporary lane blockages/closures on adjacent streets of Eden Landing Road, Production Avenue, and Investment Boulevard during daytime hours. If required, a full or partial closure of Eden Landing Road would interfere with the designated Class II bike lane on that roadway. Given that these roadways have only one travel lane in each direction, a partial closure of any one of these streets would require traffic control to allow for the passage of through traffic past the closure.

Temporary traffic controls could be implemented to ensure the safe passage of bicyclists in a reduced-width and/or one-lane environment. Depending on the extent of construction encroachment into the right-of-way, controls may allow vehicles and bicycles to pass safely, direct bicycles to take the full lane for better visibility, or provide a bicycle detour around the construction area. If lane-sharing is encouraged, "Bicyclists Allowed Use of Full Lane" signs may be used, while detours could include temporary bike lanes denoted with traffic markers. The project is not expected to temporarily or permanently alter any public roadways or intersections beyond these measures.

The City of Hayward, as the permitting agency, would ensure the project applicant obtains the proper encroachment permit to minimize disruption to Eden Landing Road, Production Avenue, and Investment Boulevard during construction (Hayward 2023). Furthermore, the City of Hayward, as the permitting agency, would require the applicant to obtain any required permits from Caltrans for the movement of oversized or excessive load vehicles on state roadways prior to construction to reduce effects on the state transportation network. The permitting process ensures that all applicable requirements are complied with. Project construction would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit,

roadway, bicycle, and pedestrian facilities, and would therefore have less than significant impacts.

Operation

Less Than Significant Impact. Operation of the project would occur fully on-site and would not obstruct pedestrian, bike, or transit facilities. Additionally, the project would not interfere with any future pedestrian, bike, or transit plans for the area. As noted in subsection 4.17.1, "Environmental Setting," the City of Hayward BPMP recommends a Class IV separated bikeway along Clawiter Road, between SR92 and Eden Landing Road. Specific designs for the Class IV separated bike lane proposed for Clawiter Road are not yet available. As the roadway is a designated truck route, however, the design is expected to accommodate truck access and maintain current turning movements, ensuring project site access is unaffected by bikeway improvements.

The project would be consistent with the General Plan circulation policies which are intended to contribute to the city's multimodal system and maximize connections. The project would involve the construction of new sidewalks along the project frontages and thus would contribute to the overall enhancement of the pedestrian network.

The City of Hayward, as the permitting agency, would determine any TDM activities or conditions of approval necessary for the project to be consistent with General Plan Policies intended to improve multimodal accessibility between land uses and facilitate the use of non-vehicular travel. For these reasons, operation of the project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, and would therefore result in less than significant impacts.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines section 15064.3, subdivision (b), states that VMT is the most appropriate measure of transportation impacts under CEQA. VMT refers to the amount and distance of automobile travel attributable to a project. Increased VMT exceeding an applicable threshold could constitute a significant impact. If existing models or methods are not available to estimate the VMT for a particular project being considered, a lead agency may analyze the project's VMT qualitatively, evaluating factors such as the availability of transit or proximity to other destinations.

Construction

Less Than Significant Impact. For construction traffic, a qualitative analysis of VMT impacts (instead of a more detailed quantitative analysis) is often appropriate (see CEQA Guidelines section 15064.3, subdivision (b)(3)) (CCR 2023). Project construction would involve a temporary increase in vehicle trips resulting from workers commuting to the project site and the delivery and hauling of project materials.

Demolition, grading, excavation, and construction would take place in two phases. Demolition of the existing building and infrastructure that cannot be reused, grading of the entire site, excavation, and construction is anticipated to begin summer 2025 and last approximately 22 months. The construction workforce is estimated to have a peak number of workers of approximately 150 per day and an average of approximately 100 per day (DayZenLLC 2024l).

Like other recent data center projects, construction workforce daily trip generation was estimated using the daily trip rates for employees at a general light industrial facility. The Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, provides a trip generation rate for general light industrial land uses (land use code 110) of 3.10 daily one-way trips per employee (ITE 2021).

Project construction is estimated to generate an average of 310 daily one-way construction worker trips and peak of 465 daily one-way construction worker trips. Calculations for the project's construction workforce trip generation estimates are shown in **Table 5.17-1**.

TABLE 5.17-1 TRIP GENERATION ESTIMATES – CONSTRUCTION OPERATIONS			
Construction Phase	Anticipated Daily Workforce¹	Rate²	Daily Trips
Construction Peak	150	3.10 trips per construction worker	465
Construction Average	100		310

Notes:

1 Anticipated daily workforce numbers based on the STACK SVY03A Revised Project Description - Part I of II (DayZenLLC 2024l).

2 ITE Trip Generation land use category (110) Industrial – General Light Industrial, General Urban/Suburban: Daily Trips $T = 3.10 (x)$, where x represents the number of employees.

Source: ITE Trip Generation Manual, 11th Edition; Fehr & Peers, 2024.

Many of the construction worker trips would be expected to occur prior to the morning and evening peak traffic hours in the Hayward region, in accordance with typical construction schedules. Truck trips associated with the removal and delivery of equipment and materials would occur throughout the day and would be scheduled for off-peak regional traffic hours whenever possible. The preparation of the site would include grading the entire site. It is possible that up to 7,000 cubic yards of soil would be imported to raise the site. Grading of the site is not expected to require the export of any soil or undocumented fill material (DayZenLLC 2024j). It is estimated that the importation of soil could be transported to the site via approximately 467 truck trips over two months, for an average frequency of about 10 trucks per day (DayZenLLC 2024j). If larger articulated trucks are available to perform his work, the average number of trips could be reduced to 5 truck trips per day (DayZenLLC 2024j).

Projects under construction are required to comply with traffic control plan requirements of the City of Hayward as noted in the City's encroachment permit specifications (Hayward 2024a). These plans are designed to minimize disruptions to

traffic and conflicts between modes so work in the public right-of-way is done in an expeditious manner and causes as little inconvenience to the traveling public as possible. Further, all public traffic would be permitted to pass through the work areas with the least obstruction and inconvenience and all modes must be allowed to pass at all times except during an emergency closure. Therefore, construction-related activity would not disrupt existing travel patterns of vehicles, bicyclists, pedestrians, or transit users in a manner that would increase baseline VMT.

Upon the completion of construction, all temporary worker commute trips and truck trips would cease. As such, project-related construction trips would generally be minor and limited to construction equipment and personnel and would not result in long-term trip generation. Further, construction trips would not result in temporary average daily emissions increases that exceed the Bay Area Air Quality Management District (BAAQMD) CEQA threshold or obstruct the implementation of plans and policies related to the reduction of greenhouse gas emissions by reducing VMT. Refer to **Section 5.3 Air Quality** for information related to exhaust emissions during construction. For these reasons, project construction would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Operation

Less Than Significant Impact. The data center would be operational 24-hours, 7-days a week, with an anticipated employment of 45 people, including security and maintenance staff (DayZenLLC 2024I). Operations trips would be generated by these staff.

According to the preliminary site plan dated July 12, 2024, the project would provide 71 parking spaces, which is less than the 1,249 spaces required by the City of Hayward Municipal Code Section 10-2.340, parking requirements for Office, Retail, and Service Uses (Hayward 2024a). This requirement is based on square footage and does not accurately reflect the parking demands of a data center where ample square footage is dedicated to industrial uses with low employee density. Therefore, application of this code requirement leads to an overestimation of required parking. Assuming each employee drives alone and all are present simultaneously, the proposed parking supply is sufficient to accommodate the anticipated 45 employees, including security and maintenance staff, while providing a surplus of 26 spaces for visitors and deliveries during peak usage.

The trip generation was determined based on average rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, as shown in **Table 5.17-3**. This manual provides trip rates based on land use. For the project, ITE Land Use *160: Data Center* was used, which estimates 0.99 one-way trips would occur for every 1,000 square feet of data center land use. Based on a transportation operational analysis conducted for the proposed project, it is estimated that the project would generate a total of 310 daily worker one-way trips, including 34 trips occurring in the morning peak hours (7:00–9:00 a.m.) and 28 trips occurring in the afternoon peak

hours (4:00–6:00 p.m.). Accounting for trips generated by existing uses, the project is estimated to generate approximately 250 Daily, 23 AM peak period, and 29 PM peak period net fewer one-way vehicle trips.

Table 5.17-3 PROJECT TRIP GENERATION ESTIMATE

Land Use	Size ¹	Daily ²	AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
Proposed New Uses								
Data Center ³	310.5	310	19	15	34	8	20	28
Existing Uses								
Industrial Park ⁴	167.5	560	46	11	57	13	44	57
Net New Vehicle Trips		-250	-27	4	-23	-5	-24	-29

1. KSF = 1,000 square feet.

2. This Daily total estimate reflects one-way trips.

3. ITE Trip Generation land use category (160) Industrial - Data Center, General Urban/Suburban (Adj Streets, 7-9AM, 4-6PM)

Daily: T = 0.99 (X)

AM Peak Hour: T = 0.11 (X) (55% entering, 45% exiting)

PM Peak Hour: T = 0.09 (X) (30% entering, 70% exiting)

4. ITE Trip Generation land use category (130) Industrial - Industrial Park, General Urban/Suburban (Adj Streets, 7-9AM, 4-6PM)

Daily: T = 3.37 (X)

AM Peak Hour: T = 0.34 (X) (81% entering, 19% exiting)

PM Peak Hour: T = 0.34 (X) (22% entering, 78% exiting)

Sources: ITE Trip Generation Manual, 11th Edition; Fehr & Peers, 2024.

This section assesses the impacts of the project on VMT, in accordance with the adopted City of Hayward's TIA guidelines. Since some land use development projects may have characteristics that are highly likely to meet thresholds for a less than significant impact on VMT, the City of Hayward, consistent with the guidance provided by the State Office of Planning and Research (OPR), developed screening criteria. According to the TIA guidelines, VMT impacts would be less than significant for the project if the following screening criterion is met:

- Small Infill Projects: The project generates 110 trips per day or fewer.

As indicated by the trip generation estimate above, the project is estimated to generate about 310 vehicle trips per day. Therefore, the project would not satisfy the small infill project criterion.

The City of Hayward TIA guidelines, provide guidance on VMT estimation for projects that do not screen out. The target VMT for the project based on its location is the existing regional average VMT per employee. According to the TIA guidelines, the project's VMT based on its location is estimated as 15 percent or more below the City average VMT per employee (Hayward 2020b). **Table 5.17-4** shows the VMT analysis conducted for the project. As shown, the project would not exceed the VMT threshold and would therefore have a less-than-significant impact on VMT.

Table 4.17-4 VMT ESTIMATION

VMT Threshold and Scenario	VMT Per Worker	
Bay Area Regional Average VMT ¹	21.8	<i>Exceed VMT Threshold?</i>
Project Threshold: Existing Regional Average VMT per Employee ²	21.8	
City of Hayward Average Daily VMT ³	18.15	
Project VMT: 15% or More Below City of Hayward Average Daily VMT ³	≤15.4	<i>NO</i>

Notes:

1. The Metropolitan Planning Commission estimate for Year 2020 regional average VMT per capita by place of work is 21.8.¹
2. Adopted thresholds of significance for Employment – Industrial land uses, according to City of Hayward TIA Guidelines Figure 8.
3. Per City of Hayward TIA Guidelines Figure 10, the project is located in an area with a designated VMT per employee per capita of 15% or more below the City of Hayward average. This is equivalent to $18.15 \times 85\% = 15.4$, or less.

Source: Fehr & Peers, 2024.

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

Construction

Less Than Significant Impact. Based on available site plans, it is not anticipated that the project could present any geometric hazards. No removal of utilities is indicated on the site plan. Construction is primarily limited to the project site but may extend into the existing Class II bicycle lane along Eden Landing Road. This bicycle lane provides a direct connection to the San Francisco Bay Trail so, as noted in subsection 4.17.2, “Environmental Impacts,” temporary traffic controls could be implemented to ensure the safe passage of bicyclists in a reduced-width and/or one-lane environment and maintain continuity of this regional bikeway connection.

The City of Hayward, as the permitting agency, would ensure the applicant obtains the proper permits, including encroachment permits, to minimize any hazards resulting from construction equipment or activities. The City of Hayward would also require the project applicant to prepare a Traffic Control Plan to ensure localized traffic control around the project site during deliveries and construction activities would not cause hazards by obstructing roadways. Furthermore, the City of Hayward, as the permitting agency, would require the project owner obtain all the required permits from Caltrans for any encroachment of state roadway and for the movement of oversized or excessive load vehicles on state roadways, and to submit to Caltrans a Transportation Management Plan, if required for the project, prior to the start of construction. These actions would

¹ For more information see MTC, Simulated VMT per Capita by Place of Work, accessed on September 30, 2024, accessed online at:

<https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689>

reduce any hazards from transportation of materials to and from the site and from construction activities affecting roadways.

As discussed under “Regulatory Background” in this section under Title 14, Part 77.9 of the Code of Federal Regulations, the threshold for the FAA notification 100 to 1 surface exceedance height is approximately 92 feet at the project site. Project construction would require a crane for placement of each generator. The crane would likely exceed 92 feet in height and would require the project owner to submit a copy of Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA. The FAA generally grants a Determination of No Hazard for temporary construction equipment. The City of Hayward, as the permitting agency for the project, would ensure consistency with this regulation and compliance with any of the FAA’s conditions. For these reasons, project construction would not increase hazards due to a geometric design feature or incompatible uses; therefore, impacts would be less than significant.

Operation

Less Than Significant Impact.

Access. The existing curb locations would largely remain unchanged, though eight current driveways would be removed and replaced with four new ones. These new driveways would be located as follows: (1) on Eden Landing Road, approximately 115 feet east of the southwest corner of the site; (2) on Eden Landing Road, approximately 220 feet south of the northwest corner of the site; (3) on Production Avenue, approximately 260 feet east of the northwest corner of the site; and (4) on Investment Boulevard at the south corner of the site for PG&E maintenance worker access to the existing transmission tower. Site access control measures include automatic vehicle gates at Driveways 1 and 3, while Driveway 2 would be secured by a screen wall. Driveway 4 does not appear to have any gate or screen wall restricting access. Adequate sight distance is provided for all four driveways.

The four driveways would serve different vehicle types, as follows:

- **Driveway 1 – Eden Landing Road:** Serves as the primary site access for vehicles, trucks, bicycles, and pedestrians. It provides entry to a pullout area with access to visitor parking spaces and the main security checkpoint. Anticipated truck usage includes WB-62 trucks, front-loading collection trucks, and pumper fire trucks.
- **Driveway 2 – Eden Landing Road:** Provides PG&E access to the private substation and serves as an emergency vehicle entrance. Vehicles would enter the site via this driveway then circle the substation and exit the site via Driveway 1. Trucks using this driveway include WB-62 trucks and pumper fire trucks.
- **Driveway 3 – Production Boulevard:** Dedicated to emergency vehicle access, restricted to pumper fire trucks.

- **Driveway 4 – Investment Boulevard:** Dedicated to PG&E vehicle access to an on-site transmission tower and line located within an PG&E easement, anticipated truck usage includes WB-62 trucks.

Passenger vehicle turning movements at Driveway 1 can be accommodated within the space between the driveway and the security checkpoint, minimizing any surface transportation hazards. Truck turning templates show that WB-62 trucks, front-loading collection trucks, and pumper fire trucks can safely enter and exit the site using the designated driveways, excluding the short PG&E access Driveway 4 for which no turning templates are provided because this driveway would be used only for transmission line maintenance activities by PG&E staff. Additionally, templates confirm that trucks can circulate throughout the site via the main drive aisle, which has a minimum width of 20 feet. WB-62 trucks can access the loading docks, and front-loading collection trucks can reach the trash enclosures. Truck turning movements at Driveways 1 and 2 indicate that trucks exiting the site may encroach on the striped Class II bicycle lanes on Eden Landing Road. Despite this, sight lines are sufficient to give drivers clear visibility of cyclists traveling in either direction.

According to the site plan dated July 12, 2024, the project would provide up to 71 parking spaces, including 4 ADA-compliant spaces and 18 electric vehicle (EV) or EV-capable spaces (DayZenLLC 2024k). The Hayward Municipal Code Section 10-2.340 requires 1,249 spaces based on the site's square footage; however, because the data center will only employ 45 operational employees, the applicant requested an exception to reduce the number of parking spaces per the Hayward Municipal Code Section 10-2.420(c). Therefore, the proposed 71 spaces are sufficient to meet the needs of the anticipated 45 employees, with a surplus of 26 spaces for visitors. The proposed parking plan meets the minimum requirements for ADA and EV charging spaces, including the necessary dimensions. The standard perpendicular parking spaces adjacent to or across from the west side of Building A are, however, 18 feet long, which is less than the 19-foot minimum required by Hayward Municipal Code Section 10-2.602 (Hayward 2024b). The drive aisle adjacent to perpendicular parking spaces measures 30 feet wide or more, which exceeds the minimum drive aisle width of 20-feet wide required by Hayward Municipal Code Section 10-2.620 (Hayward 2024c). The site plan should be adjusted to decrease the drive aisle width by at least one foot to adjacent to perpendicular parking spaces to accommodate spaces 19 feet long.

Bicyclists would access the site from the Class II bicycle lane on Eden Landing Road via Driveway 1. The project would provide 10 short-term and 7 long-term bicycle parking spaces, meeting the minimum requirements set by CALGreen Title 24, Part 11, Section 5.106.4 (CALGreen 2022b). The short-term bicycle parking would be located within 10 feet of Building B, visible from the main entrance yet outside the pedestrian sidewalk clear zone. Long-term bicycle parking lockers would be situated approximately 32 feet east of Building B, near to and accessible from the main pedestrian gate and turnstile.

The absence of pedestrian facilities in the surrounding street network and the lack of nearby transit options suggest a low demand for pedestrian access. The project site would be accessible via 4.5- to 5.5-foot-wide sidewalks along the Eden Landing Road, Production Boulevard, and Investment Boulevard frontages. On-site sidewalks would connect Eden Landing Road to visitor parking and Building B's main entrance. Internal sidewalks and crosswalks would provide pedestrian circulation throughout the site, linking parking areas to the entrances of Buildings A and B. Given the access described above and truck turning movement diagrams, project operation would not increase surface transportation hazards.

Structure Height. The project is located approximately 1.75 miles (9,290-feet) south of the Hayward Executive Airport. Tall structures can potentially pose a hazard to occupants of aircraft, depending on the heights of structures and their proximity to air traffic. Incompatible uses near airports can also pose hazards to aircraft. As discussed under the **Regulatory Background** heading of this section, Figure 3-5 of the CLUP shows the FAR Part 77 surface at the project site extends from 202 feet to 250 feet above mean sea level (AMSL); meaning any structures at the project site exceeding 202 to 250 feet AMSL, depending on the structure location, could pose a safety hazard (Alameda County 2012). The project site surface elevation is approximately between 13 and 20 feet AMSL; therefore, any structure greater than 182 feet above in height AGL may pose a safety hazard. The highest point of the proposed project, the top of the rooftop penthouse, would be approximately 115-feet above ground level (AGL), or 135 AMSL considering the 20-foot site surface, and would not exceed the FAA's FAR Part 77 obstruction surface height of 182-feet.

However, under federal law, 14 CFR § 77.5 et. seq, the height threshold for FAA notification of 100 to 1 surface exceedance height is approximately 92 feet at the project site. The project's maximum structure height of 115 feet would exceed the FAA's obstruction surface of 92 feet at the project site. The project applicant is therefore required to submit a Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA. On January 2, 2025, following the project applicant's submission of Form 7460-1 for project structures ranging from 30 to 115 feet AGL, several "Determinations of No Hazard to Air Navigation" were received from the FAA (DayZenLLC 2024n). In addition, the project applicant is required to file a 7460-2, Part 2 any time the project is abandoned or within five days after the construction reaches its greatest height. The City of Hayward, as the permitting agency for the project, would ensure consistency with this regulation and compliance with any of the FAA's conditions. As a result, project operation would not result in hazards to aircraft from a geometric design feature, such as structure height.

Thermal Plumes. The project would include 28 backup emergency generators and 24 roof-mounted air chillers (DayZen 2024l). The project's backup emergency generators and chillers would discharge thermal plumes, high-velocity columns of hot air, during operation. Thermal plume velocities would be greatest at the discharge points, with plume velocities decreasing with increasing altitude. Plume velocities would also be

highest during certain weather conditions, such as cool temperatures and calm winds. High velocity thermal plumes have the potential to affect aviation safety, and the FAA Aeronautical Information Manual identifies thermal plumes as potential flight hazards (FAA 2022), though it should be noted that while the FAA regulates the height of physical structures, it does not regulate plumes. Aircraft flying through thermal plumes may experience significant air disturbances, such as turbulence and vertical shear. The FAA manual advises that, when able, a pilot should fly upwind of smokestacks and cooling towers to avoid encountering thermal plumes.

CEC staff uses a peak vertical plume velocity of 10.6 meters per second (m/s) (5.3 m/s average plume velocity) as a screening threshold for potential impacts to aviation. Based on a literature search, this velocity generally defines the point at which aircraft begin to experience severe turbulence. The applicant modeled the plume velocity of the project's backup generators and rooftop chillers to determine whether the project's thermal plumes would exceed 10.6 m/s at altitudes where aircraft would fly.

The applicant's analysis was independently reviewed and accepted by the CEC Air Quality staff. CEC staff calculated the vertical velocity of the plumes from the backup generators would not drop below 10.6 m/s until reaching an altitude of 140 feet AGL. The vertical velocity of the plumes from the chillers would not drop below 10.6 m/s until reaching an altitude of 280 feet AGL.

Considering the stack and fan elevations² for the emergency generators and chillers, the emergency generators would produce a plume reaching hazardous velocities of 10.6 m/s up to an altitude of 240 feet AGL and the chillers would produce a plume reaching hazardous velocities of 10.6 m/s up to an altitude of 388 feet AGL over the project site. Therefore, thermal plumes generated by the chillers would encroach into the FAA obstruction surface (shown in Figure 3-5 of the CLUP), which ranges from 202 feet to 250 feet AMSL over the site. However, this worst-case scenario plume would only happen infrequently during worst-case weather conditions, which typically only occur during a few hours each year³.

Title 14, Section 91.119 of the Code of Federal Regulations states that unless necessary for takeoff or landing, the minimum safe altitudes for aircraft are 500 feet AGL for non-congested areas, such as the area around the project site and 1,000 feet AGL for congested areas (CFR 2023b). Furthermore, the recommended Traffic Pattern Altitude (TPA) for the Hayward Executive Airport ranges from 650 feet to 800 feet. Therefore, aircraft would not fly over the project site at an altitude where the high velocity portion of the plume would occur. Because full operation of the emergency chillers resulting in the worst-case plume scenario would only occur during cool weather and calm winds, and because low altitude overflight at elevations where thermal plumes would occur

2 The stacks of the emergency generators are a maximum height of 100-feet AGL. The chiller system fans are a maximum height of 108-feet AGL (DayZenLLC 2024a).

3 Meteorological data provided by the Bay Area Air Quality Management District AERMOD data for the Hayward Executive Airport.

over the site would be rare, it is unlikely that worst case plume velocities would coincide with low altitude overflight of the site. As a result, impacts to aircraft from thermal plumes would be less than significant. The City of Hayward, as the permitting agency for this project would ensure compliance with the FAA's determination. The project is also consistent with General Plan policies concerning airport hazards and airspace protection and with CLUP policies, as discussed further in **Section 5.9 Hazards and Hazardous Materials** and **Section 5.11 Land Use** of this document. As discussed above, the project would not substantially increase hazards to aircraft from either a geometric design feature, such as structure height, or incompatible uses, including land uses or thermal plumes. The project would not substantially increase any other hazards. For these reasons, impacts would be less than significant.

d. Result in inadequate emergency access?

Construction and Operation

Less Than Significant Impact. Per the application, emergency access to the project site is provided by three of the project driveways. Truck turning templates indicate a pumper fire truck can maneuver into and out of the site without encroaching on curbs. As previously noted, internal circulation would be provided by a drive aisle with a minimum width of 20 feet, which meets the Title 19, California Code of Regulations, Section 3.05 requirements for fire department access and egress. Lastly, the project would not physically block any access roads or result in traffic congestion that could significantly compromise timely access to this facility or any other location during construction and operation. Therefore, the impact would be less than significant.

5.17.3 Mitigation Measures

None required.

5.17.4 References

AC Transit 2024 – AC Transit. Maps & Schedules. Accessed on September 30, 2024.
Accessed online at: <https://www.actransit.org/maps-schedules>

Alameda County 2012 – Alameda County Airport Land Use Commission (Alameda County). Hayward Executive Airport Comprehensive Land Use Plan. Accessed on June 7, 2024. Accessed online at:
https://www.acgov.org/cda/planning/generalplans/documents/HWD_ALUCP_082012_FULL.pdf

Alameda CTC 2020 – Alameda County Transportation Commission (Alameda CTC). Alameda CTC VMT per Employee Central Planning Area. Accessed on June 6, 2024. Accessed online at: https://www.alamedactc.org/wp-content/uploads/2020/06/VMT_per_Employee_Central_Planning_Area.pdf

CALGreen 2022a – CALGreen Title 24, Part 11, Section 5.106.3 Electric vehicle (EV) charging. Accessed June 17, 2024. Accessed online at:

<https://codes.iccsafe.org/s/CAGBC2022P1/chapter-5-nonresidential-mandatory-measures/CAGBC2022P1-Ch05-SubCh5.1-Sec5.106.5.3>

CALGreen 2022b – CALGreen Title 24, Part 11, Section 5.106.4 Bicycle Parking.

Accessed June 17, 2024. Accessed online at:

<https://codes.iccsafe.org/s/CAGBC2022P1/chapter-5-nonresidential-mandatory-measures/CAGBC2022P1-Ch05-SubCh5.1-Sec5.106.5.3>

CA Veh Code 1992 – California Vehicle Code (CA Veh Code). VEH § 35780, dated 1992.

Accessed online at:

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=VEH&division=15.&title=&part=&chapter=5.&article=6

Caltrans 2019 – California Department of Transportation (Caltrans). Comments on the Laurelwood Initial Study (19-SPPE-01, TN 229939), dated October 1, 2019.

Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01>

CFR 2023a – Code of Federal Regulations (CFR). Title 14, Section 77.9, Construction or Alteration Requiring Notice. Accessed on: June 3, 2023. Accessed online at:

<https://ecfr.io/Title-14/Section-77.9>

CFR 2023b – Code of Federal Regulations (CFR). Title 14, Section 91.119, Minimum Safe Altitudes: General. Accessed on: June 3, 2023. Accessed online at:

<https://ecfr.io/Title-14/Section-91.119>

DayZenLLC 2024a – DayZenLLC (TN 254405). STACK SVY03A Supplemental Data Responses Set 1, dated February 12, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZenLLC 2024j – DayZenLLC (TN 258028). STACK Responses to CEC Data Request 4 - SVY03A Campus, dated July 26, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024k – DayZenLLC (TN 258534). STACK SVY03A Revised Project Description - Part II of II, dated August 16, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024l – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024n – DayZenLLC (TN 260703). STACK SVY03A Final FAA NODs - SVY03A, dated December 18, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

FAA 2017 – Federal Aviation Administration (FAA). Aeronautical Information Manual, Chapter 7. Safety of Flight, Section 5: Potential Flight Hazards, Subsection 7-5-15: Avoid Flight in the Vicinity of Exhaust Plumes (Smoke Stacks and Cooling Towers), October 12, 2017. Accessed on: January 2, 2020. Accessed online at: https://www.faa.gov/air_traffic/publications/atpubs/aim_html/index.html

FAA 2022 – Federal Aviation Administration (FAA). Aeronautical Information Manual, Chapter 7. Safety of Flight, Section 6: Potential Flight Hazards, Subsection 7-6-16: Avoid Flight in the Vicinity of Exhaust Plumes (Smoke Stacks and Cooling Towers), November 3, 2022. Accessed on: December 30, 2022. Accessed online at:
https://www.faa.gov/air_traffic/publications/atpubs/aim_html/chap7_section_6.html

Hayward 2014 – City of Hayward (Hayward). *Looking Forward 2040 General Plan*. Adopted July 1, 2014. Accessed online at: https://www.hayward-ca.gov/sites/default/files/Hayward_2040_General_Plan_FINAL.pdf

Hayward 2020a – City of Hayward (Hayward). City of Hayward, Bicycle & Pedestrian Master Plan Update 2020. Accessed on June 5, 2024. Accessed online at:
https://www.hayward-ca.gov/sites/default/files/Hayward%20BPMP_Final%20Plan.pdf

Hayward 2020b – City of Hayward (Hayward). City of Hayward, Transportation Impact Analysis Guideline. Accessed on June 6, 2024. Accessed online at:
https://www.hayward-ca.gov/sites/default/files/documents/MTCTO11_Hayward-TIAGuidelines_Final.pdf

Hayward 2024a – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.340 – Office, Retail, and Service Uses. Adopted November 28, 2017. Accessed June 17, 2024. Accessed online at:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_IIIRERAPASP_S10-2.340OFRESEUS

Hayward 2024b – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.602 – Parking Space Dimensions. Adopted January 23, 2023. Accessed June 17, 2024. Accessed online at:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIDESTPALOSP_S10-2.602PASPDII

Hayward 2024c – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.624 – Circulation to Parking and Loading Spaces. Adopted January 23, 2023. Accessed June 17, 2024. Accessed online at:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIDESTPALOSP_S10-2.624CIPALOSP

Hayward 2024d – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.710 – Parking Spaces for Persons with Physical Disabilities. Accessed June 17, 2024. Accessed online at:
https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIDESTPALOSP_S10-2.710PASPDII

ARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIIPAPEPHDI_S10-
2.710REPASPPEPHDI

Hayward 2024e – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.720 – Required Parking Space Size for Persons with Physical Disabilities. Accessed June 17, 2024. Accessed online at: https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYW-ARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIIPAPEPHDI_S10-2.720REPASPSIPEPHDI

Hayward 2024f – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-2.810 – Electric Vehicle Charging Requirements by Use. Adopted November 20, 2023. Accessed June 17, 2024. Accessed online at: https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYW-ARD_MUNICIPAL_CODE_CH10PLZOSU_ART2OREPARE_VIIRREEVCHIN_S10-2.810ELVECHREUS

Hayward 2024g – City of Hayward (Hayward). City of Hayward, Municipal Code Section 10-24.3.2.050 – Parking and Loading. Adopted January 23, 2024. Accessed June 17, 2024. Accessed online at: https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYW-ARD_MUNICIPAL_CODE_CH10PLZOSU_ART24MIBOCO_SUBARTICLE_10-24.3SUZO_DIV10-24.3.2GEST_10-24.3.2.050PALO

Hayward 2024h – City of Hayward (Hayward). Encroachment Permit (Major and Minor), dated April 26, 2023. Accessed online at: <https://hayward-ca.gov/services/permits/encroachment-permit>

ITE 2021 – The Institute of Transportation Engineers. Trip Generation Manual, Eleventh Edition's trip generation rate. Accessed online at: <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>

5.18 Utilities and Service Systems

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to utilities and service systems.

UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

5.18.1 Environmental Setting

Potable Water Supply

Potable water for the project would be provided by the city of Hayward, Water and Sewer Service. The city of Hayward receives water from two sources, both supplied by the San Francisco Public Utilities Commission (SFPUC): 85 percent from the Hetch-Hetchy reservoir in the Sierra Nevada mountains and 15 percent from local reservoirs. Per a 2009 agreement between the City of San Francisco and 24 municipal whole customers (including Hayward), SFPUC has a perpetual commitment to deliver 184 million gallons (or 564.7 acre-feet [AF]) per day (Hayward 2021). During the 2021/2022 fiscal year, the city of Hayward provided 15,736 acre-feet (AF) of potable water to its service area.

The potable water demand in the city of Hayward service area is projected to increase to 21.81 million gallons per day or 24,430 acre-feet per year (AFY) by 2045 (BAWSCA 2023).

Recycled Water Supply

Phase I of Hayward's recycled water project began deliveries to customers in March 2022. Wastewater is brought to the Hayward water pollution control facility (WPCF) and is treated to tertiary levels. Currently, the system delivers approximately 188 AFY of recycled water to customers through an 8.5-mile network of distribution pipelines (Hayward 2024a). During the 2021/2022 fiscal year, the city of Hayward provided 24 AF of recycled water to its service area (BAWSCA 2023). The WPCF is located less than 0.6 miles northwest of the project site. The state of California Water Code sections 13550 and 13551 include strong language prohibiting the use of potable water where recycled water can be used, such as cooling, if recycled water is available and economically feasible. The nearest Hayward recycled water system pipeline terminates approximately 1,800 feet west-northwest of the project site along Whitesell Street. However, upon evaluating recycled water as a source for project evaporative cooling, it was determined that the water quality was insufficient for that purpose (DayZenLLC 2023a).

Wastewater Service

The city of Hayward, Water and Sewer Service is responsible for the wastewater collection system within the city. Wastewater is collected by the city's sanitary sewer system and is conveyed by pipelines to the Hayward WPCF. Solids separated during primary treatment are used to make biogas that fuels a cogeneration engine that in turn powers the WPCF pumps. The WPCF has a permitted capacity to treat 18.5 million gallons per day (mgd) of wastewater and currently treats an average of 11.3 mgd (Hayward 2014b). Thus the WPCF has 7.2 mgd, or 39 percent of available capacity.

Approximately 1.4 percent of the wastewater that passes through the WPCF is treated to tertiary levels and delivered to commercial/industrial customers through the recycled water system. The remainder of the WPCF effluent is treated to secondary levels and is disinfected and conveyed to the East Bay Discharges Authority (EBDA) Marina Dechlorination Facility (EBDA 2018). There it is combined with other municipal wastewater effluent, dechlorinated using sodium bisulfite, and discharged to San Francisco Bay via an underwater outfall more than seven miles offshore. The treated wastewater is discharged to the San Francisco Bay under National Pollutant Discharge Elimination System (NPDES) permit CA0037869 (SFB-RWQCB 2017).

The Hayward WPCF is scheduled to complete Phase II upgrades in late 2028 to limit the discharge of nutrients to the San Francisco Bay (Hayward 2023). These upgrades will comply with more stringent discharge requirements mandated by Order No. R2-2022-0023 to update NPDES permit CA0037869 (SFB-RWQCB 2022).

Storm Sewer Service

The project would be constructed in the city of Hayward, within the Mount Eden Creek watershed (Alameda County 2024). This watershed drains to the San Francisco Bay, located approximately 1.7 miles east of the project site. The city of Hayward owns and maintains the municipal storm drainage system in the vicinity of the project site. The proposed project storm drain system would connect to the municipal system via a 33-inch storm drainpipe near the southwest corner of the project site (DayZenLLC 2023a). Storm water from the project site drains into Mount Eden Creek, which discharges to the San Francisco Bay (Alameda County 2024).

Solid Waste

Solid waste and recycling collection for businesses at commercial properties in Hayward is provided by Waste Management, Inc. through an agreement with the city. Recyclable and organic wastes are separated from commercial solid waste at the Davis Street Resource Recovery Complex in San Leandro, California. After sorting, recyclable materials are captured for reuse, diverting them from landfills. Organic waste is transported to the Redwood Recycling Center composting facility in Marin County. The remaining solid waste, or trash, is transported to the Altamont Landfill outside of Livermore, California (Hayward 2024b). Altamont Landfill is permitted to accept a maximum of 11,150 tons of solid waste per day and has a remaining capacity of 65,400,000 cubic yards (cy) (CalRecycle 2024), which is equivalent to approximately 10 million tons using a conversion of 0.15 ton/cy for mixed solid waste.

Electric Power, Natural Gas, and Telecommunications

The project site is located in the city of Hayward which is within the service area of Ava Community Energy (Ava), formerly East Bay Clean Energy, a community choice energy program. Ava procures electricity for its customers while Pacific Gas and Electric Company (PG&E) acts as the transmitter and distributor of the electricity and is responsible for maintaining the power lines. Ava is locally governed by a Board and Community Advisory Commission that conducts publicly open business meetings (Ava 2024).

Telecommunication services would be provided by one of several fiber optics providers in the project area, such as CenturyLink, RCL Communications Inc., Teledynamic Communications, and others. Telecommunication services would be provided to the facility via established rights of way, as is the industry's common practice.

Natural gas would be supplied by PG&E. A main natural gas pipeline is 0.4 miles east-northeast of the project site (PG&E 2024a), which would provide the natural gas supply for comfort heating.

Regulatory Background

Federal

Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The State Water Resources Control Board (SWRCB) and its nine RWQCBs are responsible for the regulation and enforcement of the water quality protection requirements of the federal Clean Water Act (CWA) and the state's Porter-Cologne Water Quality Control Act (Porter-Cologne). The National Pollutant Discharge Elimination System (NPDES) is the permitting program that allows point source dischargers to comply with the CWA and Porter-Cologne laws. This regulatory framework protects the beneficial uses of the state's surface and groundwater resources for public benefit and environmental protection. Protection of water quality could be achieved by the proposed project by complying with applicable NPDES permits from the SWRCB or the San Francisco Bay RWQCB.

Under Section 303(d) of the CWA, states are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern. The TMDL is the quantity of pollutant that can be assimilated by a water body without violating water quality standards. Listing of a water body as impaired does not necessarily suggest that the water body cannot support the beneficial uses; rather, the intent is to identify the water body as requiring future development of a TMDL to maintain water quality and reduce the potential for future water quality degradation. Old Alameda Creek, south of the project site, is currently listed on the United States Environmental Protection Agency's Section 303(d) California Listed Waters for trash.

The San Francisco Bay RWQCB issued a Municipal Regional Storm Water NPDES Permit (Permit Number CAS612008) to 77 Bay Area municipalities, including the city of Hayward. The permit requires the co-permittees to implement a storm water quality protection program. Under the provisions of the Municipal NPDES Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct storm water treatment controls to treat post-construction storm water runoff. The permit requires the post-construction runoff from qualifying projects to be treated by using low impact development treatment controls, such as biotreatment facilities.

The Alameda County Clean Water Program (ACCWP) assists co-permittees, such as the city of Hayward, in the implementation of the provisions of the Municipal NPDES Permit. In addition to water quality controls, the Municipal NPDES Permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to beneficial uses of local rivers, streams, and creeks.

Per provision C.3.g.i of the Municipal NPDES Permit, projects are exempt from the hydromodification management if they do not meet the size threshold, drain into tidally influenced areas, or are located in a highly developed catchment or subwatershed. The

project site is located in a tidally influenced area and is therefore not subject to hydromodification management requirements (Alameda County 2024).

State

California Water Code, Sections 10910-10915. California Water Code (Sections 10910-10915) requires water service providers to evaluate stresses to the water supply service system caused by proposed project developments. The code sections require public water systems to prepare water supply assessments (WSA) for certain defined development projects subject to the California Environmental Quality Act (CEQA).

According to Section 10912, if a "Project" meets any of the following criteria, then a detailed WSA would be required to be prepared by the water supplier:

- a. A proposed residential development of more than 500 dwelling units.
- b. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- c. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- d. A proposed hotel or motel, or both, having more than 500 rooms.
- e. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- f. A mixed-use project that includes one or more of the projects specified in this subdivision.
- g. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Per the project description (DayZenLLC 2023a), criteria (a) through (f) do not apply due to project type, building area, or occupancy. Regarding criteria (g), further guidance for how to interpret section 10912 of the Water Code is provided in a guidance prepared by the California Department of Water Resources (DWR 2003). According to the guidance, it is assumed one dwelling consumes 0.3 to 0.5 AF of water per year. Therefore 500 dwelling units would be interpreted to mean 150 to 250 AFY of potable water (DWR 2003). The annual water demand for that project would be approximately 9.56 AFY of potable water (DayZenLLC 2023h), which would be de minimis compared to 150 to 250 AFY. Therefore, the project does not meet the requirements for a WSA. **Integrated Waste Management Act.** The Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), requires cities and counties to reduce, by 50 percent (in reference to 1990 levels), the amount of solid waste disposed of in landfills by the year 2000 and beyond. To comply with the Integrated Waste Management Act, counties adopt regulations and policies to fulfill the requirements of the Act.

California Assembly Bill 341 (Mandatory Commercial Recycling Measure).

Effective on May 7, 2012, AB 341 set a statewide goal of reducing solid waste by 75 percent by 2020. It also established mandatory recycling programs for solid waste generated by businesses, public entities, and multi-family dwellings generated solid waste. In addition, the Governor signed SB 1018 on July 27, 2012, which requires any business generating over 4 cy of solid waste per week to arrange for recycling services.

California Senate Bill 1383 (Short-Lived Climate Pollutant Reduction Law).

Approved by the Governor on September 19, 2016, SB 1383 established statewide targets to reduce disposal of organic waste to 50 percent of 2014 levels by 2020 and to 75 percent of 2014 levels by 2025.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Code (2011), Title 24 Update (2014). The California Green Buildings Standards Code applies to planning, design, operation, construction, use, and occupancy of newly constructed buildings and requires installation of energy- and water-efficient indoor infrastructure. The related waste management plan is required to allow for diversion of 50 percent of the generated waste away from the landfill.

California Senate Bill 350 (Renewable Energy Targets). SB 350, the Clean Energy and Pollution Reduction Act of 2015 was signed into law by California Governor Jerry Brown on October 7, 2015. This Bill calls for adoption of regulations to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030. SB 350 also requires establishment of annual targets for statewide energy efficiency savings and demand reduction by November 1, 2017. These energy efficiency savings and demand reductions will be designed to achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas use by January 1, 2030.

California Senate Bill 100 (The 100 Percent Clean Energy Act of 2018). SB 100 increases the target procurement of electricity from renewable sources to 60 percent by 2030 from the previous target of 50 percent identified in SB 350. Additionally, SB 100 targets 100 percent of electricity sold in California come from eligible renewable energy resources and zero-carbon resources by 2045. The adoption of SB 100 will impact the implementation of electric power facilities through 2045. The SB 100 Joint Agency Report: Charting a path to a 100 percent Clean Energy Future, estimates an increased utility-scale capacity of 145 GW by 2045, which includes in state and out of state renewable sources and energy storage.¹

Local

City of Hayward General Plan. The City of Hayward 2040 General Plan (General Plan) includes the following policies related to utilities and service systems (Hayward

2014a):

- **Natural Resources Element;**

- **NR-6.2 - Saltwater Intrusion Prevention** - The City shall prohibit groundwater withdrawals in industrial and commercial areas near the Bay shoreline which could result in saltwater intrusion into freshwater aquifers.
- **NR-6.9 - Water Conservation** - The City shall require water customers to actively conserve water year-round, and especially during drought years.
- **NR-6.10 - Water Recycling** - The City shall support efforts by the regional water provider to increase water recycling by residents, businesses, non-profits, industries, and developers, including identifying methods for water recycling and rainwater catchment for indoor and landscape uses in new development.
- **NR-6.12 - Dual Plumbing Systems** - The City shall encourage the installation and use of dual plumbing systems in new buildings to recycle greywater.
- **NR-6.16 - Landscape Ordinance Compliance** - The City shall continue to implement the Bay-Friendly Water Efficient Landscape Ordinance.

- **Public Facilities and Services Element;**

- **PFS-3.11 Water Supply During Emergencies** - The City shall, to the extent feasible, maintain adequate water supply during emergencies. The City shall maintain emergency water connections with the Alameda County Water District and the East Bay Municipal Utility District in case of disruption of delivery from San Francisco Public Utility Commission and maintain emergency wells for short duration use in an emergency and ensure that wells meet primary drinking water standards.
- **PFS-3.13 New Development** - The City shall ensure that water supply capacity is in place prior to granting building permits for new development.
- **PFS-3.16 Recycled Water** - The City shall increase use of recycled water where appropriate, cost effective, safe, and environmentally sustainable. The City shall work with regional partners to encourage expansion of recycled water infrastructure.
- **PFS-4.9 Service New and Existing Development** - The City shall ensure the provision of adequate wastewater service to all new development, before new developments are approved, and support the extension of wastewater service to existing developed areas where this service is lacking.,
- **PFS-7.3 Landfill Capacity** - The City shall continue to coordinate with the Alameda County Waste Management Authority to ensure adequate landfill capacity in the region for the duration of the contract with its landfill franchisee.
- **PFS-7.12 Construction and Demolition Waste Recycling** - The City shall require demolition, remodeling and major new development projects to salvage

or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.

- **PFS-8.5 Undergrounding New Utility Lines** - The City shall require that all new utility lines constructed as part of new development projects are installed underground or, in the case of transformers, pad-mounted.

City of Hayward Municipal Code.

- **Article 12 - Bay-Friendly Water Efficient Landscape Ordinance** - The City Council declares that promoting landscape practices that use water efficiently is in the public's interest. This includes new construction with an aggregate landscape area greater than 500 square feet.

5.18.2 Environmental Impacts

- a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Construction and Operation

Less Than Significant Impact. The project's wastewater flow during construction and operation would be treated by the WPCF, which in turn is combined with the wastewater streams from other municipalities, dechlorinated, and discharged to San Francisco Bay via an underwater outfall. The discharge is in accordance with the EBDA NPDES wastewater discharge permit that is monitored by the San Francisco Bay RWQCB to ensure compliance. Furthermore, as discussed under criterion "c", below, the WPCF has sufficient available capacity to accommodate the project's estimated wastewater flow. Therefore, the project would not cause the WCPF to exceed its wastewater treatment requirements under the EBDA NPDES wastewater discharge permit for project construction and operation. The impact of the project on wastewater treatment capacity would be less than significant.

Electricity supply for construction and operation of the proposed project would be procured by Ava Community Energy and delivered by PG&E. Ava Community Energy has sufficient energy to serve the expected future demand of the project. Project electric demand during construction and operation would not be substantial and would not be expected to affect existing users. Therefore, potential impacts regarding electrical service would be less than significant.

Telecommunication services for the proposed project would be provided by vendors that have been serving the existing businesses in the project area. These vendors have adequate available capacity to accommodate the project needs during construction and

operation. The impact of the project on telecommunication services would be less than significant.

Natural gas for comfort heating would be supplied by PG&E. According to their website, PG&E supplies 970 billion cubic feet of natural gas to 15 million customers each year (PG&E 2024b). Demand during operations would not be substantial on a regional or statewide scale. PG&E's available natural gas supply represents far more gas than would be required for a project of this size. The project would not require new or expanded natural gas infrastructure. Therefore, the impact of the project on the natural gas system would be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Construction and Operation

Less Than Significant Impact. The water system in the city is operated and maintained by the Hayward water and sewer utility. The city is supplied with potable water by the SFPUC and is sourced from two sources: 85 percent from the Hetch-Hetchy reservoir in the Sierra Nevada mountains and 15 percent from local reservoirs (Hayward 2021). During the 2021/2022 fiscal year, the SFPUC supplied Hayward approximately 15,736 AF of potable water (BAWSCA 2023).

Project construction is expected to last for about 22 months, during which water demand would be approximately 1.75 AF, equivalent to an average annual demand of about 0.95 AFY. Operational water demand would be 9.56 AFY, consisting of facility cooling (4.50 AFY), domestic use (1.31 AFY), and landscaping (3.75 AFY) (DayZenLLC 2023h). Water demand for both construction and operations represent a negligible amount compared to SFPUC water deliveries to Hayward.

Although elements of the Hayward General Plan (Hayward 2014a) encourage the use of the city's recycled water system, the applicant ruled out its use for evaporative cooling due to unacceptable water quality (high concentrations of ammonia and alkalinity). Use of recycled water for landscaping purposes was also deemed infeasible due to the cost of connecting to the system 1,800 feet away from the project site (DayZenLLC 2023h).

According to California Water Code, Sections 10910-10915, the project does not meet the requirements for a WSA. Per the project description (DayZenLLC 2023a), criteria (a) through (f) do not apply due to project type, building area, or occupancy. Regarding criteria (g), further guidance for how to interpret section 10912 of the Water Code is provided in a guidance prepared by the California Department of Water Resources (DWR 2003). According to the guidance, it is assumed one dwelling consumes 0.3 to 0.5 AF of water per year. Therefore 500 dwelling units would be interpreted to mean 150 to 250 AFY of potable water (DWR 2003). The annual water demand for that

project would be approximately 9.56 AFY of potable water (DayZenLLC 2023h), which would be de minimis compared to 150 to 250 AFY.

According to the city of Hayward Urban Water Management Plan (UWMP), there should be adequate water supply during normal years to meet projected demands through 2040. During a single dry-year scenario, projected water supply deficits would vary between 2,342 million gallons per year (MGY) (or 7,187 AFY) in 2025 to 2,762 MGY (or 8,476 AFY) in 2040. Projected water supply deficits during multiple dry-year scenarios would vary between 2,934 MGY (or 9,004 AFY) for a second dry year in 2026 to 3,928 MGY (or 12,055 AFY) for a fifth-year scenario in 2040. Under drought conditions, the city would enact elements of the Water Shortage Contingency Plan (Appendix K of the UWMP), which would include mandatory conservation measures, pumping Haywards five emergency groundwater wells, and employing emergency agreements with other regional water agencies such as East Bay Municipal Utility District and the Alameda County Water District.

Since the water demand for both construction and operations represent a negligible amount of Hayward water deliveries, impacts on the local water supply for project operation would be less than significant.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Construction and Operation

Less Than Significant Impact. As stated above in the "Environmental Setting" subsection, the WPCF treats an average of 11.3 mgd of wastewater, leaving 7.2 mgd or 39 percent of available treatment capacity, or 39 percent of the permitted capacity of 18.5 mgd. The project would generate an average of approximately 2,565 gallons per day (DayZenLLC 2024b), which is approximately 0.04 percent of the available treatment capacity of the WPCF. Implementation of the proposed project would not result in a need to increase the wastewater treatment design capacity for the WPCF and thus would be less than significant.

d. Would the project 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?

Construction and Operation

Less Than Significant Impact. Demolition and construction activities for the project would result in short-term increase of minor amounts of solid waste. The project is estimated to generate 413.16 tons of solid waste per year or 1.13 tons per day, during operations (DayZenLLC 2023b). Project solid waste would be disposed at the Altamont

Landfill, which is permitted to accept a maximum of 11,150 tons of solid waste per day and has a remaining capacity of 65,400,000 cubic yards (cy) (CalRecycle 2024). The daily amount of solid waste generated by the project during operations would represent 0.01 percent of the facility's permitted daily acceptance volume. The estimated annual volume of operational solid waste generated by the project is 2,754 cy (USEPA 2016), which is approximately 0.004 percent of the remaining capacity for Altamont Landfill. The project would be accommodated by the existing solid waste facility, and the impact resulting from the proposed project on landfill capacity would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction and Operation

No Impact. The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires local jurisdictions in California to reduce, by 50 percent, the amount of solid waste disposed of in landfills by the year 2000 and beyond. During construction, the project would collect and haul construction debris off-site for recycling or disposal in local jurisdictions that comply with this state requirement and have programs in place to ensure that disposal of solid waste meets these requirements. The project would comply with these requirements by complying with city requirements. The project would not result in an impact on solid waste collection and would comply with management and reduction regulations (DayZenLLC 2023b). Typically, data centers do not generate special or unique wastes. Likewise, the project would not generate any special or unique wastes that would cause the project to violate federal, state, and local statutes or solid waste management and reduction regulations. Management of hazardous waste and applicable federal regulations are discussed in **Section 4.9 Hazards and Hazardous Materials**. During operation, the project would comply with federal, state, and local statutes and regulations related to solid waste.

There would be no change in compliance with federal, state, or local statutes and regulations related to solid waste management and reduction. No impact would occur.

5.18.3 Mitigation Measures

None.

5.18.4 References

Alameda County 2024 – Alameda County Flood Control & Water Conservation District (Alameda County). Interactive Map: Alameda County Watersheds. Accessed on: March 14, 2024. Accessed online at: <https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds>

Ava 2024 – Ava Community Energy (Ava). Ava Community Energy/About Us website. Accessed on: March 13, 2024. Accessed online at: <https://avaenergy.org/about/>

- BAWSCA 2023 – Bay Area Water Supply & Conservation Agency (BAWSCA). Annual Survey, Fiscal Year 2021-22, BAWSCA. March 2023. Accessed on: March 13, 2024. Accessed online at: https://bawsca.org/uploads/userfiles/files/Annual%20Survey_FY21-22_FINALv2.pdf
- CalRecycle 2024 – California Department of Resources Recycling and Recovery (CalRecycle). Altamont Landfill & Resource Recovery (SWIS Facility No 01-AA-0009), SWIS Facility/Site Activity Details website. Accessed on March 14, 2024. Accessed online at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/7>
- DayZenLLC 2023a – DayZenLLC. (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023b – DayZenLLC. (TN 252250). STACK SVY03A – SPPE Application – Main App, Part II of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZenLLC 2023h – DayZenLLC. (TN 253638). STACK SVY03A –STACK Responses to CEC Data Request Set 1, dated December 15, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DayZen 2024b – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>
- DWR 2003 – Department of Water Resources (DWR). Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. California Department of Water Resources. October 8, 2003. Accessed on: May 7, 2020. Accessed online at: https://water.ca.gov/LegacyFiles/pubs/use/sb_610_sb_221_guidebook/guidebook.pdf
- EBDA 2018 – East Bay Dischargers Authority (EBDA). Technical Memorandum 1, Hydraulic Model Recalibration and Capacity Analysis. May 2018. Accessed on: March 13, 2024. Accessed online at: https://ebda.org/wp-content/uploads/2019/12/EBDA_2018HydraulicStudy_TM-05032018.pdf
- Hayward 2014a – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. July 2014. Accessed on: March 15, 2024. Accessed online at: https://www.hayward-ca.gov/sites/default/files/Hayward_2040_General_Plan_FINAL.pdf
- Hayward 2014b – City of Hayward (Hayward). The City of Hayward, Wastewater Collection and Treatment Service, Local Agency Formation Commission. PowerPoint presentation. July 10, 2014. Accessed on: March 13, 2024. Accessed online at: <https://alamedalafco.org/wp-content/uploads/2021/12/Wastewater-Hayward.pdf>

- Hayward 2021 – City of Hayward (Hayward). The City of Hayward, 2020 Urban Water Management Plan, Final. July 2021. Accessed on: March 12, 2024. Accessed online at: https://www.haywardca.gov/sites/default/files/Hayward_2020%20UWMP_Final.pdf
- Hayward 2023 – City of Hayward (Hayward). The City of Hayward WPCF Nutrient Management & Phase II Improvements website. Accessed on: March 13, 2024. Accessed online at: <https://hayward-ca.gov/content/wpcf-nutrient-management-phase-ii-improvements>
- Hayward 2024a – City of Hayward (Hayward). The City of Hayward Recycled Water Program, Frequently Asked Questions. Spring 2024. Accessed on: March 13, 2024. Accessed online at: <https://www.hayward-ca.gov/sites/default/files/documents/Hayward%20Recycled%20Water%20FAQ-20240227.pdf>
- Hayward 2024b - City of Hayward (Hayward). The City of Hayward Garbage and Recycling website. Accessed on: March 13, 2024. Accessed online at: <https://www.hayward-ca.gov/your-environment/garbage-and-recycling>
- PG&E 2024a – Pacific Gas and Electric Company (PG&E). Natural Gas Transmission Pipeline Interactive Map. Accessed on: March 14, 2024. Accessed online at: <https://www.pge.com/en/about/pge-systems/gas-systems.html#tabs-fc6b80548f-item-727cbee02b-tab>
- PG&E 2024b – Pacific Gas and Electric Company (PG&E). Gas Systems website. Accessed on: March 28, 2024. Accessed online at: <https://www.pge.com/en/about/pge-systems/gas-systems.html#tabs-fc6b80548f-item-94036063d6-tab>
- SFB-RWQCB 2017 – San Francisco Bay Regional Water Quality Control Board (SFB-RWQCB). Order No. R2-2017-0016, NPDES No. CA0037869. Signed May 12, 2017. Accessed on: March 13, 2024. Accessed online at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2017/R2-2017-0016.pdf
- SFB-RWQCB 2022 – San Francisco Bay Regional Water Quality Control Board (SFB-RWQCB). Tentative Order No. R2-2022-0023, NPDES No. CA0037869. Signed July 15, 2022. Accessed on: March 14, 2024. Accessed online at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2022/R2-2022-0023.pdf
- USEPA 2016 – United States Environmental Protection Agency (USEPA). Volume-to-Weight Conversion Factors, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery. April 2016. Accessed on: April 2, 2024. Available online at: https://www.epa.gov/sites/default/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf

5.19 Wildfire

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to wildfires.

WILDFIRE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
i. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental criteria established by CEQA Guidelines, Appendix G.

5.19.1 Environmental Setting

Fire Hazard Mapping

CalFire Fire Hazard Severity Zones. The California Department of Forestry and Fire Protection (CAL FIRE) identifies and maps areas of significant fire hazards based on fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, typical fire weather for the area, and other relevant factors. The maps identify this information as a series of Fire Hazard Severity Zones (FHSZ), which are progressively ranked in severity as un-zoned, moderate, high, and very high. Fire Hazard Severity Zone maps evaluate "hazard," not "risk"; wildfire "hazard" is based on the physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfire, or fuel reduction efforts (CAL FIRE 2025c).

Wildland Fire Hazard Severity Zones in California are divided into State, local, or federal government responsibility areas. State Responsibility Areas (SRA) includes those areas where the financial responsibility of preventing and suppressing fires falls primarily on

the State. Local Responsibility Areas (LRA) are locations where the responding agency is the county or city.

CPUC High Fire Threat District Map

Over the last two decades, the California Public Utilities Commission (CPUC) has adopted a series of fire safety rules which includes the preparation of Fire-Threat and High Fire-Threat District (HFTD) Maps and the identification, evaluation, and adoption of more fire-safety regulations for the high fire threat districts. Areas mapped as high fire threat are required (under CPUC General Orders 95, 165, and 166) to have increased patrols along overhead lines, increased vegetation clearances and frequency of vegetation clearance, increased inspections of aerial communications facilities, and increased maintenance and repairs to correct fire hazards. The HFTD maps identify three tiers of fire threat/risk: Tier 1 zones near communities, roads, and utility lines, and are a direct threat to public safety; Tier 2 fire-threat areas outline areas where there is a higher risk (including likelihood and potential impacts on people and property) from utility related wildfires; and Tier 3 fire-threat areas outline areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility related wildfires.

Wildfire Hazards

Wildfires are and have been an important natural process throughout California's history. However, recent changes in wildfire locations and increases in frequency and intensity are posing increasing threats to the population and environment of California. More acres in California have burned in the past decade than in the previous nine decades and eight of California's ten largest wildfires (between 1932 and 2022) have occurred in the last decade. Wildfires in California have had tragic consequences with nearly 150 fatalities between 2010 and 2022, over 97,000 structures destroyed between 2005 and 2022 (California AG 2022).

Wildfires in California can have significant adverse ecological impacts that can result in habitat loss and fragmentation, shifts in vegetative compositions, reductions in small mammal populations, and accelerated loss of predatory species. Wildfire can also have adverse impacts on erosion and water quality. During active burning, ash and associated contaminants can enter water supplies. After large burns, rainstorms can flush vast amounts of sediment from exposed soils into those same water supplies (California AG 2022).

The project site is located within the city of Hayward in Alameda County in an urban environment consisting primarily of a mix of light industrial, commercial, and business park properties. Properties to the northeast, southeast, and southwest of the project site are primarily light industrial facilities, business parks, and warehouses. South of the light industrial/warehouse properties southeast of the project site is the PG&E Eastshore Substation. Properties northwest of the project site across Eden Landing Road are commercial and consist of a strip mall with two buildings occupied primarily by

restaurants. North of the commercial buildings and the project site is Highway 92. The city of Hayward is not located in or near a SRA, but is located within an LRA (CALFIRE 2025a, CALFIRE 2025b). The project is not near a moderate, high, or very high FHSZ, or land classified as having a fire threat by the CPUC. The city of Hayward is also not at the wildland and urban interface and is not in the vicinity of wildlands.

Regulatory Background

Federal

No federal regulations related to wildfires apply to the project.

State

Fire Hazard Severity Zones (Pub. Resources Code, §§ 4201-4204). The purpose is to provide for the classification of lands within SRAs in accordance with the severity of fire hazard present and identify measures to be taken to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Fire Hazard Severity (Cal. Code Regs, tit. 14, § 1280). FHSZs reflect the degree of severity of fire hazard.

California Public Utilities Commission General Orders. The California Public Utilities Commission (CPUC) regulates private investor-owned utilities in the state of California. The following CPUC General Orders are applicable to the project.

General Order 95. CPUC General Order 95 applies to construction and reconstruction of overhead electric lines. General Order 95 includes Rules which apply to overhead electric lines located in Tier 2 or Tier 3 High Fire Threat Districts (HFTDs), which include corrective actions, maintenance, increased inspection, vegetation management to establish clearances, and establishment of minimum vertical, horizontal, and radial clearances of wires from other wires.

General Order 165. General Order 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. A "Patrol" inspection, defined as a simple visual inspection of utility equipment and structures that is designed to identify obvious structural problems and hazards, must be performed at least once per year for each piece of equipment and structure. "Detailed" inspections, where individual pieces of equipment and structures are carefully examined, are required every 5 years for all overhead conductor and cables, transformers, switching/protective devices, and regulators/capacitors. A utility subject to this General Order must submit an annual report of its inspections by July 1 of each year for the previous year.

General Order 166. General Order 166 requires that Investor Owned Utilities (IOUs) develop a Fire Prevention Plan, which describes measures that the electric utility will

implement to mitigate the threat of power line fires. Under General Order 166 the IOUs are required to outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. IOUs are also required to prepare an emergency response plan. Further, utilities are required to report annually to the CPUC regarding compliance with General Order 166.

Local

Alameda County Emergency Operations Plan. The 2012 plan establishes the foundational policies and procedures that define how Alameda County will prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. It provides a description of hazards in the County and of the emergency management organization and how it is activated. The plan does include a list of evacuation routes. The plan also includes a risk assessment that identifies the natural hazards and risks that can impact a community based on historical experience; an estimate of the potential frequency and magnitude of disasters; and, assess potential losses to life and property. The plan also includes developed mitigation goals and objectives as part of a strategy for mitigating hazard-related losses.

Local Resilience Plan. The purpose of Hayward's (LRP) is to assess hazard risks and asset vulnerability in the City of Hayward and use that information to identify strategies to reduce future losses from natural hazards. The 2021 LRP serves as a guiding document for the City's hazard mitigation activities and was developed in fulfillment of and alignment with the City Council's "Safe" priority and informed by General Plan Community Safety Element and Hazards Element goals.

5.19.2 Environmental Impacts

- a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:**
 - i. Substantially impair an adopted emergency response plan or emergency evacuation plan?**

Construction

No Impact. During project construction, traffic levels would experience a minimal increase that is not expected to degrade traffic performance significantly. Emergency response access during construction would not be significantly impeded. The project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No streets would be closed, rerouted, or substantially altered during construction.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. The project site is currently developed with the Eden Landing Business Park and would continue to be developed with implementation of the project. The project does not involve the addition of a large number of new people to the local area that could increase emergency response demand during a potential evacuation. Thus, the project would not interfere with the coordination of the county's or city's emergency operations plan at the emergency operations center or alternate emergency operations center, nor would the project interfere with any statewide emergency response, or evacuation routes or plans. Adequate emergency access to the project site and surrounding area would be maintained.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

ii. Would the project 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?

Construction and Operation

No Impact. The topography of the project site is flat and is in a fully urbanized area with industrial and commercial buildings to the west, east, north and south with minimal slopes. Though some of the land surrounding the site could contain grass subject to ignition, most of the surrounding land is maintained with irrigated landscaping and very limited dry vegetation. Therefore, project construction would not exacerbate wildfire risk or expose occupants to pollutant concentrations from a wildfire.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

iii. Would the project 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?

Construction

No Impact. The project would construct several offsite linear features that include a potable water line, a sanitary sewer line, and a storm water drainage line. The construction of these utilities would not block access to any road or result in traffic congestion. The potable, storm water, and sanitary lines would be underground utilities that travel mostly or follow existing paved roadways. Therefore, the project

infrastructure would not constitute a possible ignition source for local vegetation, nor would it block access to any road or result in traffic congestion.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. The site is currently developed as the Eden Landing Business Park and redevelopment of the site for the project would not require the installation of associated infrastructure that could exacerbate fire risk or result in impacts to the environment. Maintenance of the project and proposed utilities would not physically block any access roads or result in traffic congestion that could significantly compromise timely access to this facility or any other location.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

iv. Would the project 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?

Construction

No Impact. The project site is currently developed with the Eden Landing Business Park and would continue to be developed with implementation of the project. The project would not substantially alter local drainage patterns. Storm water discharge during construction would be managed according to the project's Storm Water Pollution Prevention Plan. The project would therefore not be expected to contribute to a flooding hazard onsite or offsite. For further discussion of the potential flooding impacts that could result from the construction of the proposed project, please see the discussion in **Section 4.10 Hydrology and Water Quality**.

As discussed in this section, the topography of the project site and surrounding area is relatively flat. Therefore, the project would not be exposed to post-fire slope instability or drainage changes.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. Operation of the project would not alter the course of a drainage (stream or river) and would not substantially alter local drainage patterns. The proposed onsite storm drainage system would be designed to meet the city's storm water drainage standards and sized adequately to convey water away from the site and to the city of

Hayward's storm drain system. The project would therefore not contribute to a flooding hazard onsite or offsite.

As discussed in this section, the topography of the project site and surrounding area is relatively flat. Therefore, the project would not be exposed to post-fire slope instability or drainage changes.

Additionally, the project is not located in or near a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

5.19.3 Mitigation Measures

None.

5.19.4 References

California AG 2022 – California Attorney General (California AG). "Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act", by the State of California Office of the Attorney General (Attorney General Rob Bonta). Dated October 10, 2022. Accessed online at: https://bof.fire.ca.gov/media/v1vc053c/fpc-2-b-2022-10-10-wildfire-guidance_ada.pdf

CAL FIRE 2025a – California Department of Forestry and Fire Protection (CAL FIRE). *Alameda County FHSZ Map in Local Responsibility Area*. Accessed on: January 30, 2025. Accessed online at: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-1/fhszl_map1.pdf

CAL FIRE 2025b – California Department of Forestry and Fire Protection (CAL FIRE). *Alameda County FHSZ Map in State Responsibility Area*. Accessed on: January 30, 2025. Accessed online at: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_11x17_2022_alameda_2.pdf

CAL FIRE 2025c – California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone viewer. Accessed January 2025. Accessed online at: <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones>

CPUC 2025 – California Public Utilities Commission. CPUC High Fire Threat District (HFTD) map viewer. Accessed January 2024. Accessed online at: <https://www.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2>

5.20 Mandatory Findings Of Significance

This section describes impacts specific to mandatory findings of significance associated with the construction and operation of the project.

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)??	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental checklist established by CEQA Guidelines, Appendix G.

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?

Less Than Significant with Mitigation Incorporated.

Biological Resources

Less Than Significant with Mitigation Incorporated. With the implementation of staff recommended mitigation measures (**BIO-1** and **BIO-2**) included in **Section 5.4 Biological Resources**, the project would not substantially degrade the quality of the environment, substantially reduce the existing habitat of any fish or wildlife species,

cause any fish or wildlife population to drop below self-sustaining levels, threaten to eliminate any plant or animal community, or substantially reduce the number or restrict the range of an endangered, threatened, or rare plant or animal species. The project site is currently developed and is located within a highly developed area consisting of commercial, and industrial developments. The project site and these surrounding properties do not support natural vegetation that would allow for extensive wildlife foraging or occupancy. However, mature landscape trees and shrubs may provide nesting opportunities for protected bird species. In addition, sensitive habitat along the San Francisco Bay is located approximately 0.5 miles west of the site which include restored salt ponds, marshlands, and wetlands that support diverse wildlife, including threatened and endangered species. Given the site's proximity to these areas, special-status and migratory birds may forage or nest within the project area. The implementation of mitigation measures **BIO-1** and **BIO-2**, which would require avoidance and minimization measures for protected bird species including worker environmental awareness training and nesting bird surveys, would ensure that project impacts would be less than significant.

Cultural and Tribal Cultural Resources

Less Than Significant with Mitigation Incorporated. Important examples of the major periods of California history or prehistory represented by historical, unique archaeological, or tribal cultural resources are not known to be present in the project area. Nevertheless, the extent of proposed ground disturbance has the potential to damage unknown, buried archaeological resources in the project area. As described in **Section 5.5 Cultural and Tribal Cultural Resources**, most archaeological resources aged about 5,000 years or older are buried beneath the ground surface. If these resources were to be exposed or destroyed, it would be a significant impact. Implementation of mitigation measures **CUL-1** through **CUL-4**, included in **Section 5.5 Cultural and Tribal Cultural Resources**, would reduce the impacts to buried cultural resources to a less-than-significant level. The proposed project therefore is unlikely to eliminate important examples of major periods of California history or prehistory, therefore the impact would be less than significant.

Geology and Soils

Less Than Significant with Mitigation Incorporated. There is potential for significant impacts related to strong seismic ground shaking, liquefaction and other types of seismic-related ground failure, soil erosion, unstable geologic units or soils, and expansive soils. Due to the project's location and topography, the project would not expose people or property to geologic hazards associated with fault rupture and landslides. Adherence to the City of Hayward General Plan (Hayward 2014b) policies (NR-6.4, NR-6.5, HAZ-2.1, HAZ-2.2, and HAZ-2.4), the CBC (CBC 2022), and the issuance of a building permit would mitigate potential impacts on geologic hazards and soils to less than significant.

The project would connect to an existing city provided sanitary sewer connection and would not require septic tanks or alternative wastewater disposal systems.

Significant paleontological resources that represent important examples of the major periods of California prehistory are known to be present in the region. The extent of proposed ground disturbance has the potential to damage unknown, but likely, buried paleontological resources in the project footprint. As described in **Section 5.7 Geology and Soils**, paleontological resources may be buried beneath the ground surface in Pleistocene age sediments. While no known paleontological resources exist at the project site, paleontological resources have been found in geologic formations in mountains east of the project site (UCMP 2024). There are no unique geologic features in the project footprint.

Exposure or destruction of significant paleontological resources would be a significant impact. Adherence to the City of Hayward General Plan (Hayward 2014b) policies (NR-7.1 and NR-7.2) and implementation of mitigation measures **GEO-1** included in **Section 5.7 Geology and Soils** would mitigate potential impacts to paleontological resources to less than significant. With mitigation, the proposed project is unlikely to eliminate significant paleontological resources that are part of the prehistory of California.

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant with Mitigation Incorporated. The analysis of cumulative impacts can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may select a list of projects, including those outside the control of the agency, or, alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate the regional or area-wide conditions contributing to the cumulative impact.

General Plan Projection

This section evaluates cumulative impacts using the Final Environmental Impact Report City of Hayward 2040 General Plan (General Plan FEIR) since the project would be consistent with applicable land use plans and policies (Hayward 2014a). The General Plan FEIR identified that build out of the Hayward 2040 General Plan Policy Document (General Plan) would contribute to three, significant and unavoidable cumulative impacts in the areas of air quality, noise, and transportation and circulation.

General Plan Significant Unavoidable Impacts

The General Plan FEIR identified the following significant unavoidable environmental impacts applicable to the proposed project:

- Air Quality – Conflict with or obstruct implementation of applicable Air Quality Plans, increase Short-term construction and long-term operational emissions of ROG, NOx, PM 10, and PM2.5, and exposure to toxic air contaminants and fine particulate matter.
- Noise – increase short-term construction noise and long-term traffic noise
- Transportation and Circulation – Project intersection impacts, the implementation of the General Plan would result in traffic volumes that exceed the City standard for intersection performance and cumulative intersection impacts, future growth in Hayward and the region would result in substandard intersection level of service (LOS) under 2035 conditions.

Although the project, in combination with future development in the city of Hayward, could conceivably have a significant cumulative impact to these environmental resources, the following discussion demonstrates how the project's contribution to these impacts would be less than cumulatively considerable.

Air Quality

Less Than Significant with Mitigation Incorporated. The proposed project would be located in Alameda County in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB is designated as a nonattainment area for ozone and particulate matter with a diameter of 2.5 microns or less (called "PM2.5") under both California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The SFBAAB is also designated as nonattainment for particulate matter with a diameter of 10 microns or less (called "PM10") under CAAQS, but not NAAQS. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. In developing thresholds of significance for air pollutants, BAAQMD considers the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. CEQA would then require implementation of all feasible mitigation measures.

The demolition and construction emissions of the project would be lower than the thresholds of significance from the BAAQMD CEQA Air Quality Guidelines. There is no numerical threshold for fugitive dust generated during construction in BAAQMD. BAAQMD considers fugitive dust emissions to be potentially significant without incorporation of basic construction mitigation measures, also called best management practices (BMPs). The applicant would be required to incorporate the BAAQMD's

recommended BMPs and staff identifies this as mitigation measure **AQ-1**, which includes other staff-recommended construction mitigation measures. Therefore, the project's construction emissions would not be cumulatively considerable.

For project operation, including readiness testing and maintenance, the oxides of nitrogen (NOx) emissions of the emergency backup generators are estimated to exceed the BAAQMD significance threshold of 10 tons per year. All other pollutants would have estimated emissions rates below BAAQMD significance thresholds. The NOx emissions from the emergency backup generator readiness testing and maintenance would be required to be fully offset through the BAAQMD permitting process. Therefore, the project's emissions during readiness testing and maintenance would not be cumulatively considerable.

The criteria pollutant air quality impact analysis found that the construction and readiness testing and maintenance of the gensets would not expose sensitive receptors to substantial criteria air pollutant concentrations. Therefore, the project's criteria air pollutant impacts from construction and genset readiness testing and maintenance would be less than significant.

Staff also reviewed the applicant's health risk assessment (HRA) for construction and operation (including standby generator readiness testing and maintenance). Public health impacts from project construction and operation are not likely to exceed BAAQMD significance thresholds for cancer and non-cancer chronic health risks. Even when all standby engine generators are operating concurrently, the health risks would be below BAAQMD significance thresholds. The HRA also shows that the project would not expose sensitive receptors to substantial toxic air contaminants.

Due to the infrequent nature of emergency conditions and the record of highly reliable electric service available to the project (see **Appendix B**), the project's emergency operations would be unlikely to expose sensitive receptors to substantial concentrations of criteria air pollutants or TACs.

Therefore, the project's air quality impacts would not be cumulatively significant.

Noise

Less Than Significant with Mitigation Incorporated. Construction activities would increase existing noise levels at the adjacent land uses, but they would be temporary and intermittent. However, the noise level at the closest residence due to the construction activities would remain below the existing ambient noise level. However, at the adjacent industrial property approximately 250 feet to the south of the project, construction would increase the existing ambient noise level by 14 dBA. This is significant. However, with implementation of the proposed mitigation measure **NOI-1** (See **Section 5.13, Noise and Vibration** section of this document) the noise impacts from project construction activities would be less than significant.

In addition, the City of Hayward General Plan limits the hours of construction activities to 7:00 A.M. to 7:00 P.M. Mondays through Saturdays, and 10:00 A.M. to 6:00 P.M. Sundays and holidays.

Sources of operational noise for the project would include the backup gensets, roof-top HVAC units, roof-top cooling fans, and other equipment necessary for project operation. The City's General Plan and Municipal Code establish noise standards to regulate noise impacts. The General Plan outlines exterior noise standards for various land uses including residential, commercial, and industrial areas. Moreover, Sections 4-1.03.1 and 4-1.03.4 of the Municipal Code limit noise levels at any point outside the boundaries of commercial and industrial properties. Since the General Plan's limits are more conservative than the Municipal Code's, they are taken as the threshold for evaluating project noise levels. During both normal operation and genset testing, noise levels at the closest residence due to the operation would remain below the existing ambient noise level and within the City's noise limits. Since the project is not adjacent to, or in close proximity to a residential land use (nearest residence is 3,300 feet away), noise reduction measures, such as mechanical equipment screening, would not be required and operation of the project would have a less than significant impact from mechanical equipment noise.

Transportation

Less Than Significant Impact. The General Plan FEIR anticipates significant intersection impacts from the build-out of the General Plan. As discussed in **Section 5.17 Transportation**, the project would generate VMT at a level below the city's industrial threshold and reduce the project impact to a less than significant level. The project's contribution to cumulative transportation impacts during project construction and operation would not be cumulatively considerable.

Other Technical Areas

Although the City's General Plan FEIR did not identify significant effects in the areas of air quality, cultural resources, and geology (paleontology), and did not include an analysis of impacts to tribal cultural resources as the General Plan FEIR was adopted before the passage of AB52 requiring such analysis, CEC staff concluded that the project's impacts in these areas are *less than significant with mitigation incorporated*. Thus, staff has considered whether the project would contribute to cumulatively considerable impacts in these areas. Staff has also included an analysis of potential cumulative impacts for the other technical areas where project impacts would be *less than significant*.

Aesthetics

Less Than Significant Impact. The project site is currently named Eden Landing Business Park. It has nine one-story buildings occupied as warehouse and office space, parking and loading areas, sidewalks, and landscaped interior and perimeter areas (existing physical environment).

The most publicly visible structures of the proposed project would include a three-story data center building (310,460 sq. ft.) with 28 emergency generators in a generation yard, a substation (23,210 sq. ft.), and a PG&E switching station (25,800 sq. ft.).

As discussed in **Section 5.1 Aesthetics**, review of the City General Plan, and aerial and street view imagery concluded the project site is not within a scenic vista, and there is no recognized scenic resource on the site or in the vicinity that the project would block its public view. The project would have a less than significant effect on the environment for both, which would not be cumulatively considerable.

The project is within an “urbanized area” as defined by Public Resources Code, section 21071. It would be consistent with policies in the General Plan and conform with zoning governing scenic quality and as a result have a less than significant effect on the environment that would not be cumulatively considerable.

The applicant’s application contains statements demonstrating the intent to implement shielding, directional light, non-reflectance materials, and other light pollution and reflectance project design measures. The data center building exterior surface(s) treatment, coatings, colors (blue, bronze, grey, white), textures, and materials are non-specular, spectrally flat, textured, and appear to have a reflectance less than 35 percent. New light, glare, and reflectance by the project as described and explained in this analysis would have a less than significant effect on the environment, which would not be cumulatively considerable.

Biological Resources

Less Than Significant with Mitigation Incorporated. The General Plan FEIR found less than significant biological resources impacts in the event of a full build-out scenario with implementation of recommended mitigation measures. The project site and surrounding properties are highly developed with commercial and industrial buildings and associated paved parking. The potential to degrade environmental quality is minimal, as the project site and surrounding properties do not support natural vegetation that would allow for extensive wildlife foraging or occupancy. However, mature landscaping trees and shrubs and other features on and near the project site could provide nesting opportunities for birds protected under the Migratory Bird Treaty Act and Fish and Game Code. Effects could include disruptions during the breeding season from construction and tree removal.

To ensure impact avoidance, **Section 5.4 Biological Resources** identifies the following mitigation measures: **BIO-1**, which would require worker environmental awareness training to address potential impacts to nesting birds, and **BIO-2**, which would require nesting bird pre-construction surveys and implementation of appropriate nest buffers. Biological resource impacts from construction of the proposed project would be less than significant with the implementation of staff’s proposed mitigation measures, and, therefore, would not be cumulatively considerable.

The project's 28 emergency backup diesel generators would emit oxides of nitrogen (NO_x), which contribute to nitrogen deposition and can impact sensitive ecosystems. In nitrogen-poor environments, increased nitrogen deposition can promote the spread of non-native species, potentially threatening native flora and fauna. Given the project's proximity to critical habitats, staff evaluated nitrogen deposition effects within a six-mile radius. For northern coastal salt marsh habitat, where the critical load is estimated at 30-40 kg N/ha/yr, the project's contribution, combined with baseline levels, remained well below this threshold. Similarly, for California red-legged frog and Alameda whipsnake habitats, which have a lower critical load of 5 kg N/ha/yr, the project's emissions remained significantly below the limit. As a result, the impacts on nitrogen-sensitive habitats and special-status species would not be cumulatively considerable.

Cultural and Tribal Cultural Resources

Less Than Significant Impact with Mitigation Incorporated. The General Plan FEIR does not specifically address impacts on tribal cultural resources. Historical resources and unique archaeological resources, as defined by CEQA, share several of the impact vulnerabilities that tribal cultural resources face, especially the effects of ground-disturbing activities. In addition, historical and unique archaeological resources can also qualify as tribal cultural resources. The suite of mitigation measures for cultural resources presented in the General Plan FEIR would reduce the severity of some impacts on tribal cultural resources. No known tribal cultural resources have been found on the project site, although ground disturbance associated with the proposed project could result in the exposure and destruction of buried, as-yet unknown archaeological resources that could qualify as tribal cultural resources. Implementation of mitigation measures **CUL-1** through **CUL-4** would prevent, minimize, or compensate for impacts on buried, tribal cultural resources. Project impacts to tribal cultural resources therefore would not be cumulatively considerable.

Energy and Energy Resources

Less Than Significant Impact. The project would use 28 diesel fuel-fired generators (gensets). The gensets would provide uninterruptable backup power to support the data center, its cooling equipment, other general building (administration), the security building, and life safety services. The total number of hours of operation from the gensets for operational reliability purposes would be limited to no more than 50 hours annually.

At a rate of 50 hours per year, the total quantities of renewable diesel or ULSD diesel fuel used for all the gensets operating at full load would be approximate 6,350 barrels per year (bbl/yr). California has a renewable diesel and ULSD fuel supply of approximately 6,300,000 bbl/yr and 310,000,000 bbl/yr, respectively. The project's use of fuel constitutes a small fraction of the renewable diesel and ULSD's available resources (less than 0.1 and 0.002 percent, respectively)—the supply from the combination of these two resources is more than sufficient to meet the project's necessary demand. Moreover, the current supply of renewable diesel does not account

for more refineries that are coming online, and any import supply. Future and import supply would bolster renewable diesel's available resource. Both renewable diesel and ULSD fuel supply are more than sufficient to meet necessary demand of the project. For these reasons, the project's use of diesel fuel is less than significant.

The project's consumption of energy resources during operation would not be inefficient or wasteful, as discussed in **Section 5.6 Energy and Energy Resources**. Project operation would have a less than significant adverse effect on local or regional energy supplies and energy resources and likewise, would not be cumulatively considerable.

Geology and Soils

Less Than Significant with Mitigation Incorporated. The City of Hayward General Plan identifies five policies (NR-6.4, NR-6.5, HAZ-2.1, HAZ-2.2, and HAZ-2.4), that address impacts related to geologic hazards and soils and two policies that address impacts regarding paleontological resources (NR-7.1 and NR-7.2) (Hayward 2014b). Compliance with the City of Hayward General Plan (Hayward 2014b), the CBC (CBC 2022), and issuance of building permit would mitigate potential impacts related to geologic hazards and soils on the safety of people and property to less than significant. Project impacts related to geologic hazards and soils would not be cumulatively considerable.

While no known paleontological resources have been found at the project site, ground disturbance associated with the proposed project could result in the exposure and destruction of unknown, but likely, buried and potentially significant paleontological resources. Compliance with the City of Hayward General Plan (Hayward 2014b) and implementation of mitigation measure **GEO-1** would prevent, or minimize, impacts on paleontological resources. Project impacts to paleontological resources would not be cumulatively considerable.

Greenhouse Gas Emissions

Less Than Significant Impact with Mitigation Incorporated. The BAAQMD CEQA Air Quality Guidelines do not identify a greenhouse gas (GHG) emissions threshold for construction-related emissions. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed and the impacts be determined in relation to meeting Assembly Bill (AB) 32 GHG reduction goals. The BAAQMD further recommends incorporation of BMPs to reduce GHG emissions during construction, as feasible and applicable. The project's construction emissions would be in conformance with state and local GHG emissions reduction goals, so impacts would be less than significant.

For operation, including readiness testing and maintenance-related emissions, the BAAQMD CEQA Air Quality Guidelines states that for stationary-source projects, the threshold to determine the significance of an impact from GHG emissions is 10,000 metric tons per year of carbon dioxide equivalent (MTCO₂e/yr). The 10,000 MTCO₂e/yr threshold would apply to the proposed project, which includes stationary sources that are subject to BAAQMD permitting.

Other project-related emissions from mobile sources, area sources, energy use and water use, would not be included for comparison to 10,000 MTCO₂e/yr threshold, based on BAAQMD's 2022 CEQA Guidelines. Under the BAAQMD's 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project will not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds. In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b). With the implementation of the mitigation measures described in **Section 5.8 Greenhouse Gas Emissions** of this analysis (**GHG-1**, **GHG-2** and **GHG-3**), the project would ensure that the project-related emissions would not significantly add to the global problem of climate change, nor would the project hinder California's ability to reach California's GHG reduction goals in any significant way, even when considered cumulatively.

Additionally, the project would implement efficiency measures to meet applicable city and state green building standards, and additional voluntary efficiency and use reduction measures. Indirect GHG emissions from energy used by the project and supplied by PG&E will comply with California's Renewables Portfolio Standard and Cap-and-Trade Program requirements. As such, with mitigation measures identified in **Section 5.8 Greenhouse Gas Emissions**, GHG emissions related to the project would not conflict with the City of Hayward Climate Action Plan or other plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. Therefore, the project's GHG emissions would not be considered cumulatively significant.

Hazards and Hazardous Materials

Less Than Significant with Mitigation Incorporated. As discussed in **Section 5.9 Hazards and Hazardous Materials**, the project would use hazardous materials in small quantities as associated with demolition and construction. When not in use, any hazardous material would be stored in designated construction staging areas in compliance with local, state, and federal requirements. Diesel fuel transport would comply with all appropriate regulations regarding transport of hazardous materials on California roads and highways. Although diesel fuel would be stored on-site, it would be stored in dedicated 5,400-gallon diesel fuel storage tanks for each generator. The design features of the storage tanks would ensure that the diesel fuel generators meet the secondary containment requirements of the California Health and Safety Code for the above ground petroleum storage tank program. The risk of a fire on site would be reduced to less than significant through adherence to applicable codes and the use of effective safety management practices. In addition, the project would implement procedures, safety features, and precautions that would reduce the risk of an accidental hazardous materials release. The incorporation of mitigation measure **HAZ-1** would ensure the testing and removal of lead-based paint contaminated materials prior to building demolition. With incorporation of mitigation measures **HAZ-2** and **HAZ-3**, soil and groundwater samples would be taken, and any contaminated soil and groundwater

encountered would be handled and disposed of properly. Therefore, the impact from the use, transport, disposal, or accidental release of hazardous materials would not be considered cumulatively significant.

Hydrology and Water Quality

Less Than Significant Impact with Mitigation Incorporated. The project would be required to comply with the City of Hayward's Stormwater Management and Urban Runoff Control Ordinance (Article 11.5 of the Hayward Municipal Code) and the Municipal Regional Stormwater NPDES Permit. The plans and permits work together to establish specific requirements to reduce storm water pollution from new and redevelopment projects, singularly and cumulatively. If implemented as described in **Section 5.10 Hydrology and Water Quality**, of this analysis including mitigation measure HYD-1 (that requires BMPS as part of the SWPPP), these standards would protect the watershed receiving discharge from the project from a cumulatively considerable impact to the basin's hydrology. Similarly, these same plans and permits would be protective of water quality. These standards would be protective of the quality, of both surface water and groundwater bodies, receiving discharge from the project.

Land Use and Planning

Less Than Significant Impact. The project is consistent with City of Hayward General Plan land use policies, as well as allowed uses in the City of Hayward Zoning Code for the site's zoning designation of Industrial Park. However, the project would exceed the Industrial Park zoning district's maximum height of 75 feet. A project's building height may be increased through a Major Site Plan Review approval from the City of Hayward Planning Commission if the City finds that the additional height would result in a more beneficial site layout or in public benefits/amenities that could not otherwise be achieved (COH 2024c, Section 10-1.1604). Included in the required findings for approving a Major Site Plan Review is a determination that the project is consistent with the General Plan, Zoning Ordinance, and Design Guidelines. The findings must also determine that the project site is suitable for the type and intensity of development proposed, and that the proposed development is compatible with surrounding land uses, with no substantial adverse effects to surrounding land uses (COH 2024c, §10-1.3081). The proposed project appears to meet these findings, as it is consistent with the uses allowed in the General Plan and Zoning Ordinance and is similar in character and form to nearby development. The project would also be consistent with the City of Hayward's Design Guidelines. (See **Section 5.1 Aesthetics**, of this document for more information on the City's Design Guidelines.) Staff understands that the applicant has been meeting with the City of Hayward to discuss a community benefits package to address the height exceedance, and that discussions are ongoing. Therefore, it is reasonable that the City of Hayward would approve the Major Site Plan Review. The City of Hayward's approval of a Major Site Plan Review and any related conditions of approval prior to construction would ensure the project would be consistent with local

land use regulations, and that there would be no cumulatively considerable impacts from conflicts with local land use regulations.

The project site is approximately 9,600 feet from the nearest point of a runway at Hayward Executive Airport, resulting in proposed site development exceeding 96 feet in height requiring FAA notification pursuant to 14 CFR part 77.9(b)(1) to determine if development could pose an obstruction hazard to aircraft. The proposed project has heights varying between 94 feet to the top of the main structure, 100 feet to the top of the building parapet, and 108 feet to the top of the small penthouse. Therefore, the project would require FAA review through submittal of Form 7460-1, Notice of Proposed Construction or Alteration. The City of Hayward, through its permit review process, would ensure that the applicant submits this form to the FAA and complies with any determinations and conditions imposed by the FAA. During the FAA's review of the project's height, the FAA would consider other development in the area, ensuring there would be no cumulative impacts to aircraft from obstruction hazards. (See **Section 5.17 Transportation**, for more discussion of FAA notification.)

For these reasons, the project would not result in cumulative land use impacts.

Population and Housing

Less Than Significant Impact. As described in **Section 5.14 Population and Housing**, the project would not displace any people or housing or necessitate construction of replacement housing elsewhere. Operation of the project is anticipated to require approximately 45 employees. The project's construction and operation workforce would not directly or indirectly induce a substantial population growth in the project area. Therefore, the project's contribution to the jobs-housing imbalance would not be cumulatively considerable.

Public Services

Less Than Significant Impact. As discussed in **Section 5.15 Public Services**, the construction and operation of the project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered fire and police service facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The project would be consistent with the planned growth in the general plan.

In accordance with California Government Code Section 65996, the project would be required to pay the appropriate school impact fees to the Hayward Unified School District. Operation of the project is anticipated to require approximately 45 employees, which the applicant anticipates would be drawn from the great Bay Area. Even if all of the operation workforce would relocate closer to the project site, the additional population would be consistent with growth projections and service ratios in the General Plan and thus the project would not cause significant environmental impacts associated with the provision of new or physically altered park and other public facilities in order to

maintain acceptable service ratios or other performance objectives. The project's impacts to the public services would not be cumulatively considerable.

Recreation

Less Than Significant Impact. As discussed in **Section 5.16 Recreation**, the project does not require or propose the construction or expansion of recreation facilities. Operation of the project would require approximately 45 employees. The project's operation workforce would be consistent with growth projections and service ratios in the General Plan and, thus, the project would not increase the use of existing parks or recreational facilities to the extent that substantial physical deterioration of the park or facility would result. The project's impacts to recreation would not be cumulatively considerable.

Utilities and Service Systems

Less Than Significant Impact. As determined in **Section 5.17 Utilities and Service Systems**, adequate water supply as well as wastewater treatment capacity are available to serve the project. Likewise, there are adequate telecommunication and natural gas resources in the project area to meet the project's needs. The city of Hayward has available recycling facilities and landfill capacity at the Altamont Landfill. The project would generate minimal operational waste as data centers typically require very little equipment turnover. Additionally, the project does not include a residential component and would not generate any increases in the supply and demand of utility services and infrastructure. Therefore, the project's contribution to this cumulative impact would not be considerable.

Wildfire

Less Than Significant Impact. As determined in **Section 5.19 Wildfire**, the project would not be located in or near an SRA or very high FHSZ, or land classified as having a fire threat by the CPUC. Additionally, the project would not impair an adopted emergency response plan or emergency evacuation plan. The project infrastructure would not constitute a possible ignition source for local vegetation, nor would it block access to any road or result in traffic congestion. Therefore, the project's impact to wildfire would not be considered cumulatively significant.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. The proposed project would not cause substantial adverse effects on human beings either directly or indirectly. The proposed project would result in less than significant impacts to human health during construction and operation, including changes to air quality, and exposure to geologic hazards, noise, hazardous materials, and greenhouse (GHG) emissions. As discussed in **Section 4.3 Air Quality**, with implementation of mitigation measure **AQ-1**, which includes the BAAQMD's recommended BMPs for fugitive dust and construction equipment emissions,

the project would result in a less than significant impact related to human health. As discussed in **Section 5.7 Geology and Soils**, impacts to people or property associated with geologic or seismic conditions onsite would be less than significant. As discussed in **Section 5.8 Greenhouse, Gas Emissions**, project related greenhouse gas emissions would be less than significant with implementation of mitigation measures **GHG-1, GHG-2, and GHG-3**. The project would result in temporary noise impacts to humans during construction and intermittently during operation. As discussed in **Section 5.13 Noise**, noise impacts would be less than significant with the inclusion of mitigation measure **NOI-1**. As discussed in **Section 5.9 Hazards and Hazardous Materials**, hazards impacts would be less than significant with the implementation of mitigation measures **HAZ-1** and **HAZ-2**. As discussed in **Section 5.10 Hydrology and Water Quality**, water quality impacts would be less than significant with implementation of mitigation measure **HYD-1**. No additional impacts to human beings would occur during operation and maintenance activities.

References

- CBC 2022 – California Building Standards Commission. California Code of Regulations, California Building Code (CBC). Title 24, Part 2 (Volumes 1 & 2) with July 2024 Supplement. California Code of Regulations. Accessed on: February 26, 2025. Accessed online at: <https://codes.iccsafe.org/content/CABC2022P1/california-code-of-regulations-title-24>
- Hayward 2014a - City of Hayward (Hayward). Environmental Impact Report, City of Hayward 2040 General Plan. May 2014. Accessed online at: <http://www.hayward-ca.gov/your-government/documents/planning-documents>
- Hayward 2014b – City of Hayward (Hayward). Hayward 2040 General Plan Policy Document. July 2014. Accessed online at http://www.hayward-ca.gov/sites/default/files/Hayward_2040_General_Plan_FINAL.pdf
- UCMP 2024 – University of California Museum of Paleontology (UCMP) 2021. *UCMP database*. Accessed on: February 2, 2024. Accessed online at: <http://ucmpdb.berkeley.edu/>

Section 6

Environmental Justice

6 Environmental Justice

This section describes the environmental setting and regulatory background, and discusses if impacts associated with the construction and operation of the project would disproportionately affect an environmental justice population.

6.1 Environmental Setting and Regulatory Background

The United States Environmental Protection Agency (U.S. EPA) defines environmental justice (EJ) as, “the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies” (U.S. EPA 2015, page 4).

The “Environmental Justice in the Energy Commission Site Certification Process” subsection immediately below describes why EJ is part of the California Energy Commission’s (CEC) site certification process, the methodology used to identify an EJ population, and the consideration of California Environmental Protection Agency’s (CalEPA) California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0). Below that, the “Project Outreach” subsection discusses the CEC’s outreach program specifically as it relates to the proposed project. Lastly, the “Environmental Justice Project Screening” subsection presents the demographic data for those people living in a six-mile radius of the project site and a determination on presence or absence of an EJ population. When an EJ population is identified, the analyses in 8 technical areas¹ consider the project’s impacts on this population and whether any impacts would disproportionately affect the EJ population.

Environmental Justice in the Energy Commission Siting Process

California law defines EJ as “the fair treatment of people of all races, cultures and income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code, § 65040.12; Pub. Resources Code, §§ 71110-71118). All departments, boards, commissions, conservancies and special programs of the Resources Agency must consider EJ in their decision-making process if their actions have an impact on the environment, environmental laws, or policies. Such actions that require EJ consideration may include:

- adopting regulations;
- enforcing environmental laws or regulations;
- making discretionary decisions or taking actions that affect the environment;

1 The eight technical areas are Aesthetics, Air Quality, Cultural and Tribal Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. Cultural and Tribal Cultural Resources considers impacts to Native American populations.

- providing funding for activities affecting the environment; and
- interacting with the public on environmental issues

The California Natural Resources Agency recognizes that EJ communities are commonly identified as those where residents are predominantly minorities or live below the poverty level; where residents have been excluded from the environmental policy setting or decision-making process; where they are subject to a disproportionate impact from one or more environmental hazards; and where residents experience disparate implementation of environmental regulations, requirements, practices, and activities in their communities. Environmental justice efforts attempt to address the inequities of environmental protection in these communities.

An EJ analysis is composed of the following:

- Identification of areas potentially affected by various emissions or impacts from a proposed project;
- Providing notice in appropriate languages (when possible) of the proposed project and opportunities for participation in public meetings to EJ communities;
- A determination of whether there is a comparatively larger population of minority persons, or persons below the poverty level, living in an area potentially affected by the proposed project; and
- A determination of whether there may be a significant adverse impact on a population of minority persons or persons below the poverty level caused by the proposed project alone, or in combination with other existing and/or planned projects in the area.

Bay Area Air Quality Management District Community Health Programs

The project site is located within the Bay Area Air Quality Management District (BAAQMD). BAAQMD has community health programs intended to reduce air pollution disparities in the San Francisco Bay Area. The Community Health Protection Program is BAAQMD's local implementation of the California Air Resources Board's (CARB) Community Air Protection Program, as enacted by Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017).²

² The statewide Community Air Protection Program requires CARB to develop a new community-focused program to reduce exposure more effectively to air pollution and preserve public health and to take measures to protect communities disproportionately impacted by air pollution. CARB is required to select the highest priority locations in the state for the deployment of community air monitoring systems and select locations around the state for the preparation of community emissions reduction programs. CARB's governing board has selected 17 communities for a community emissions reduction program (CARB 2023). The project site is not located in an AB 617 community.

The Community Air Risk Evaluation (CARE) program was implemented by BAAQMD to identify areas in the Bay Area that experience a disproportionate share of air pollution exposure. One goal of the CARE

CalEnviroScreen- More Information About an EJ Population

CalEnviroScreen is a science-based mapping tool used by CalEPA to identify disadvantaged communities³ pursuant to Senate Bill (SB) 535. As required by SB 535, disadvantaged communities are identified based on geographic, socioeconomic, public health and environmental hazard criteria. CalEnviroScreen identifies impacted communities by taking into consideration pollution exposure and its effects, as well as health and socioeconomic status, at the census-tract level. (OEHHA 2021, page 8)⁴.

Using data from federal and state sources, the tool consists of four components in two broad groups. The Exposure and Environmental Effects components comprise a Pollution Burden group, and the Sensitive Populations and Socioeconomic Factors components comprise a Population Characteristic Group. The four components are made up of environmental, health, and socioeconomic data from 21 indicators.

CalEnviroScreen scores presents a relative, rather than an absolute, evaluation of pollution burdens and vulnerabilities in California communities by providing a relative ranking of communities across the state (OEHHA 2021, p. 8). Calculating the CalEnviroScreen scores begins by assigning percentile scores to the 21 statewide indicators, which fall into two categories of Pollution Burden and Population Characteristics. The percentiles are averaged for the set of indicators in each of the four components (Exposures, Environmental Effects, Sensitive Populations, and Socioeconomic Factors). These four components in turn, are combined to yield an overall CalEnviroScreen score (CalEPA 2022a, p. 5-6). Each category has a maximum score of 10, and, thus, when multiplied the maximum CalEnviroScreen score is 100. Based on these scores, census tracts across California are ranked relative to one another. Values for the various components are shown as percentiles, which indicate the percent of all census tracts with a lower score. A higher percentile indicates a higher potential relative burden. A percentile does not describe the magnitude of the difference between two tracts, but rather it simply tells the percentage of tracts with lower values for that indicator (OEHHA 2021, P.20).

program is to identify areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution (BAAQMD 2023). The proposed project is not located in an impacted CARE community. (BAAQMD 2021).

3 The California Environmental Protection Agency, for purposes of its Cap-and-Trade Program, defines communities in terms of census tracts and identifies four types of geographic areas as disadvantaged: (1) census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; (4) and areas under the control of federally recognized Tribes (CalEPA 2022a)

4 Note that CalEnviroScreen is not intended to substitute for a cumulative impact analysis under the California Environmental Quality Act (CEQA); restrict the authority of government agencies in permit and land use decisions; or guide all public policy decisions.

Table 6-1 lists the indicators that go into the Pollution Burden score and the Population Characteristics score to form the final CalEnviroScreen score. These indicators are used to measure factors that affect the potential for pollution impacts in communities.

TABLE 6-1 COMPONENTS THAT FORM THE CALENVIROSCREEN 4.0 SCORE	
Pollution Burden	
Exposure Indicators	Environmental Effects Indicators
Children's lead risk from housing	Cleanup sites
Diesel particulate matter (PM) emissions	Groundwater threats
Drinking water contaminants	Hazardous waste
Ozone concentrations	Impaired water bodies
PM 2.5 concentrations	Solid waste sites and facilities
Pesticide use	
Toxic releases from facilities	
Traffic density	
Population Characteristics	
Sensitive Populations Indicators	Socioeconomic Factors Indicators
Asthma emergency department visits	Educational attainment
Cardiovascular disease (emergency department visits for heart attacks)	Housing-burdened low-income households
Low birth-weight infants	Linguistic isolation
	Poverty
	Unemployment

Notes: PM = particulate matter. PM 2.5 = fine particulate matter 2.5 microns or less. Source: OEHHA 2021

For the technical areas of Air Quality, Hydrology and Water Quality, and Utilities and Service Systems, CEC staff (staff) reviews CalEnviroScreen data for the project area as follows:

- For air quality, these indicators are; asthma, cardiovascular disease, diesel PM emissions, low birth-weight infants, ozone concentrations, pesticide use, PM2.5 concentrations, toxic releases from facilities, and traffic density.
- For hydrology and water quality, these indicators are; drinking water contaminants, groundwater threats, and impaired water bodies.
- For utilities and service systems, these indicators are; cleanup sites, hazardous waste, and solid waste sites and facilities.

When these technical areas have identified a potential project impact where an EJ population is present, CalEnviroScreen is used to better understand the characteristics of the areas where the impact would occur and ensure that disadvantaged communities in the vicinity of the proposed project have not been missed when screened by race/ethnicity and low income.

Project Outreach

Environmental justice principles are described in California Government Code section 65040.12 and may be incorporated into local land use standards. Under this guidance,

one principal of environmental justice is for government decisionmakers to engage in meaningful involvement with potentially impacted communities. Consistent with US EPA policy, meaningful involvement occurs when:

- those whose environment and/or health would be potentially affected by the decision on the proposed activity have an appropriate opportunity to participate in the decision;
- the population's contribution can influence the decision; and
- the concerns of all participants involved are considered in the decision-making process.

Furthermore, it is the policy of California Natural Resources Agency that the public, including minority and low-income populations, are informed of opportunities to participate in the development and implementation of all Resources Agency programs, caused to experience disproportionately high and adverse human health or environmental effects from environmental decisions (CNRA 2024).

The application for the STACK SVY03A Data Center Campus SPPE was filed to the project docket on September 14, 2023. Following filing of this Draft Initial Study (IS)/Mitigated Negative Declaration (MND) in the docket for the project, a Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration will also be filed to the docket and sent to responsible agencies, trustee agencies, the county clerk, organizations and individuals who have previously requested such notice and to owners and occupants of contiguous properties in accordance with CEQA Guidelines section 15072(b). The NOI, including attachments as specified in CEQA Guidelines section 15073, will be provided to responsible agencies and trustee agencies and will be submitted to the State Clearinghouse to initiate review by state agencies. Based on current U.S. Census English fluency data for the population residing in the cities and communities within a six mile radius of the project site, translation of the Notice of Intent was deemed appropriate. U.S. Census data also showed that of those who report they speak English less than "very well", the predominant language spoken was Spanish.

In accordance with the Governor's Executive Order B-10-11, the CEC's Tribal Consultation Policy, the CEC's Siting Regulations, and recent amendments to CEQA (that is, Assembly Bill 52), staff conducted outreach and consultation with regional tribal governments. Additional information regarding the outreach efforts and specific groups contacted can be found in **Section 5.5 Cultural and Tribal Cultural Resources**.

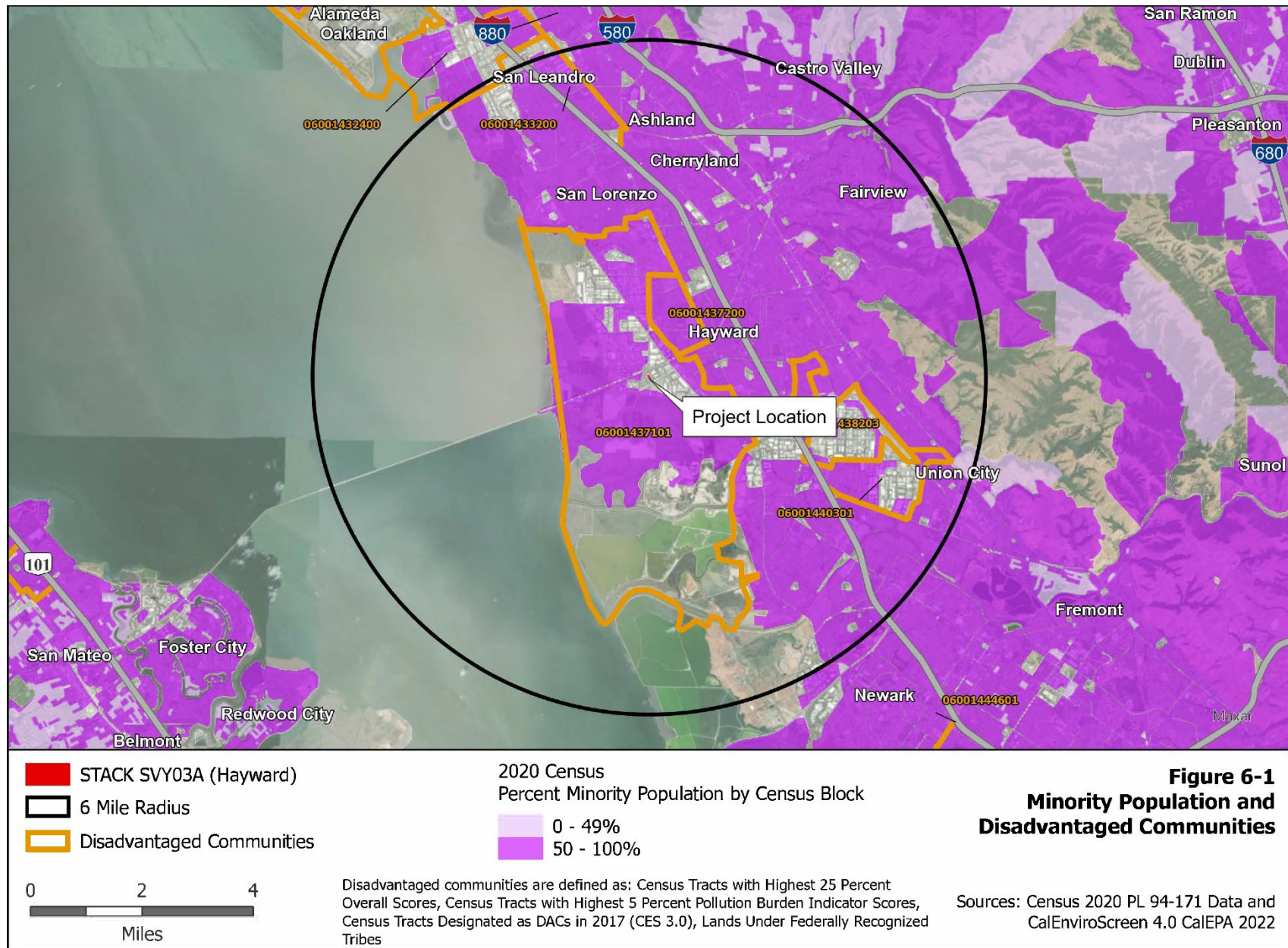
Environmental Justice Project Screening

Figure 6-1 shows 2020 census blocks in a six-mile radius of the project with a minority population greater than or equal to 50 percent (U.S. Census 2020). The population in these census blocks represents an EJ population based on race and ethnicity as defined in the U.S. EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* (U.S. EPA 2015).

Based on California Department of Education data in **Table 6-2** and presented in **Figure 6-2**, staff concludes that the percentage of those living in the Hayward Unified, New Haven Unified, San Leandro Unified, and San Lorenzo Unified school districts (in a six-mile radius of the project site) and enrolled in the free or reduced-price meal program is larger than the percentage of those living in the reference geography (Alameda County) and enrolled in these programs. Thus, the population in this school district is considered an EJ population based on low income as defined in *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

TABLE 6-2 LOW INCOME DATA WITHIN THE PROJECT AREA			
School Districts in a Six-Mile Radius of the Project Site	Enrollment Used for Meals	Free or Reduced-Price Meals	
Hayward Unified	20,193	15,502	76.8%
New Haven Unified	10,052	5,563	55.3%
San Leandro Unified	8,741	6,252	71.5%
San Lorenzo Unified	9,235	7,111	77.0%
Reference Geography			
Alameda County	211,269	100,608	47.6%

Note: **Bold** indicates school districts considered having an EJ population based on low income
Source: CDE 2024



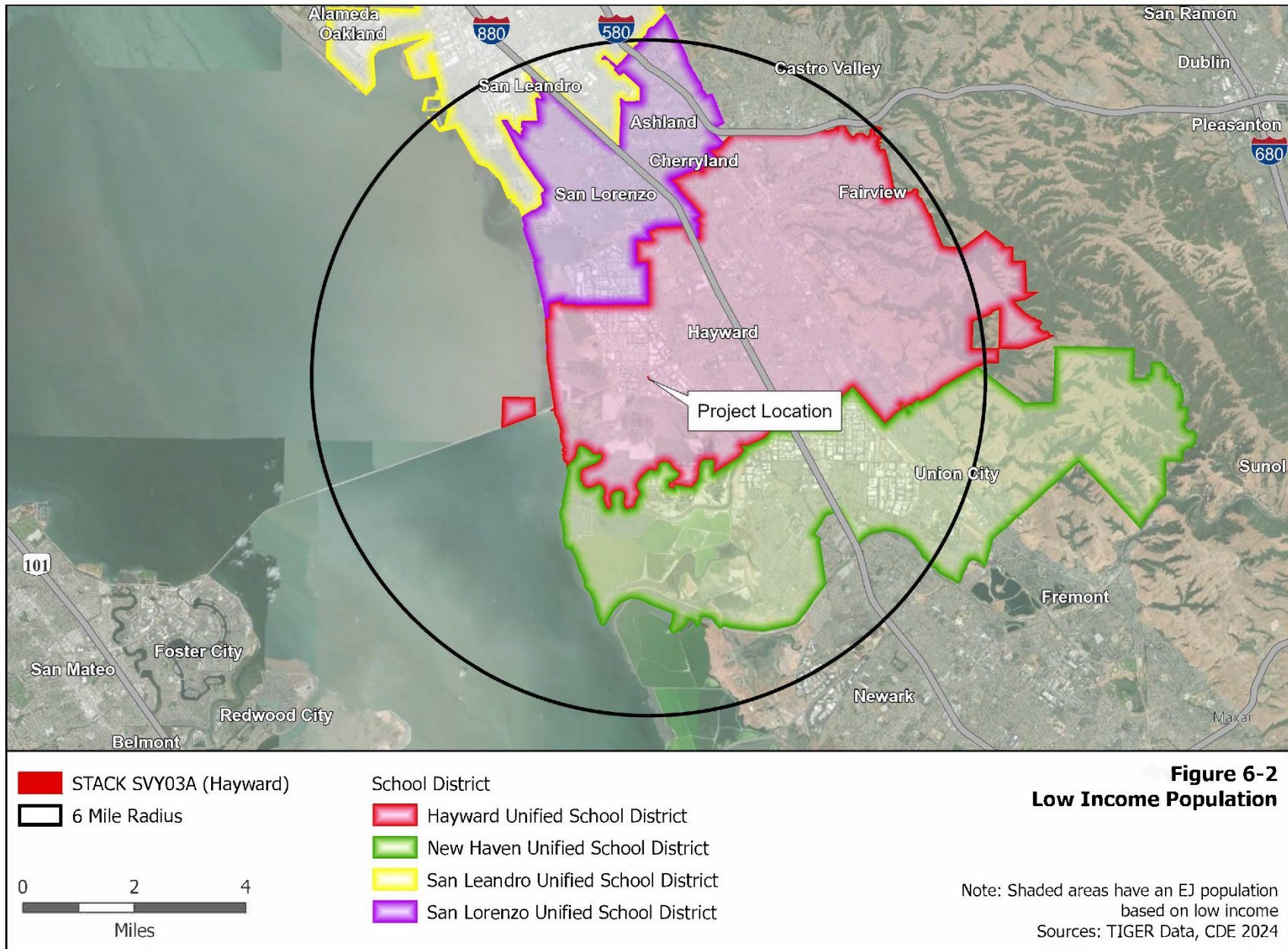


Table 6-3 presents the CalEnviroScreen overall scores and disadvantaged communities (DAC) type for the DACs in a six-mile radius of the project site. The location of each of these census tracts is shown on **Figure 6-1**. Staff used CalEnviroScreen to identify DACs in the vicinity of the proposed project and better understand the characteristics of the areas where impacts could occur.

TABLE 6-3 CALENVIROSCREEN SCORES FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Total Population	CES 4.0 Percentile	Pollution Burden Percentile	Population Characteristics Percentile
06001432400	7,003	86.78	92.11	70.66
06001432501	4,854	87.36	85.38	79.03
06001433200	7,991	79.53	80.25	70.08
06001437200	7,489	65.78	61.33	61.71
06001437101	7,867	74.21	80.06	62.28
06001438203	3,888	55.90	24.27	77.40
06001440301	7,596	65.39	78.32	50.57

Note: Disadvantaged communities by census tract in the project's six-mile radius. Shaded row indicates census tract where the project is located. Source: CalEPA 2022b

The CalEnviroScreen indicators are used to measure factors that affect the potential⁵ for pollution impacts in communities. **Table 6-4** presents the CalEnviroScreen percentiles for the indicators that make up the pollution burden percentile within a six-mile radius of the project site. **Table 6-5** presents the percentiles for the indicators that make up the population characteristics.

⁵ It is important to note that CalEnviroScreen is not an expression of health risk and does not provide quantitative information on increases of impacts for a specific site or project. CalEnviroScreen uses the criteria of "proximity" to a hazardous waste site, a leaking underground tank, contaminated soil, an emission stack (industry, power plant, etc.) to determine that a population is "impacted". It does not address general principles of toxicology; dose/response and exposure pathways. For certain toxic chemicals to pose a risk to the public, offsite mitigation pathways must exist (through ingestion, inhalation, dermal contact, etc.) and contact to a certain amount – not just any amount – must exist.

TABLE 6-4 CALENVIROSCREEN INDICATOR PERCENTILES FOR POLLUTION BURDEN FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Percentiles													
	Pollution Burden	Ozone	PM2.5	Diesel PM	Drinking Water	Lead	Pesticides	Toxic Release	Traffic	Cleanup Sites	Groundwater Threats	Hazardous Waste	Impaired Water Bodies	Solid Waste
06001432400	92.11	6.38	26.97	93.50	4.21	80.92	0.00	61.69	84.01	90.39	97.43	94.12	86.96	98.99
06001432501	85.38	6.38	24.32	99.63	4.21	77.53	0.00	54.29	91.48	88.41	84.03	77.80	86.96	63.67
06001433200	80.25	7.52	28.99	95.02	4.21	84.69	0.00	50.18	94.29	90.15	83.40	81.06	12.45	86.51
06001437200	61.33	10.57	28.72	77.66	6.74	53.06	0.00	72.69	71.93	75.66	88.38	91.95	0.00	42.31
06001437101	80.06	11.56	27.94	27.60	6.88	31.18	0.00	70.58	85.09	98.99	98.09	99.35	86.96	98.95
06001438203	24.27	14.92	29.71	55.72	6.74	22.19	0.00	56.14	70.34	20.72	74.38	81.06	0.00	0.00
06001440301	78.32	14.92	27.59	71.59	6.88	39.28	38.72	66.53	79.68	71.82	93.87	96.88	23.88	77.62

Shaded row indicates census tract where project is located. Source: CalEPA 2022b

TABLE 6-5 CALENVIROSCREEN INDICATOR PERCENTILES FOR POPULATION CHARACTERISTICS FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Percentiles								
	Population Characteristics	Asthma	Low Birth Weight	Cardiovascular Disease	Education	Linguistic Isolation	Poverty	Unemployment	Housing Burden
06001432400	70.66	82.13	89.27	58.29	65.65	56.85	49.12	28.20	52.09
06001432501	79.03	83.13	86.54	64.63	71.55	78.20	47.50	21.11	82.15
06001433200	70.08	89.48	54.85	63.05	64.52	83.84	70.13	30.88	34.25
06001437200	61.71	91.19	41.47	80.96	49.19	48.72	33.20	49.86	38.10
06001437101	62.28	90.09	81.22	78.12	50.52	35.34	34.70	30.88	12.00
06001438203	77.40	93.99	96.39	90.15	44.34	73.10	20.10	32.27	42.83
06001440301	50.57	63.32	88.85	63.57	46.81	52.01	28.86	11.87	2.62

Shaded row indicates census tract where project is located. Source: CalEPA 2022b

6.2 Environmental Impacts

The following technical areas discuss impacts to EJ populations: Aesthetics, Air Quality⁶, Cultural and Tribal Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. As noted above, the three technical areas that could have project impacts that could combine with the indicators in CalEnviroScreen are: Air Quality, Hydrology and Water Quality, and Utilities and Service Systems.

Aesthetics

A disproportionate impact pertaining to Aesthetics to an EJ population may occur if a project is in proximity to an EJ population and the following:

- The project would have a substantial adverse effect on a “scenic vista” as defined.
- The project would eliminate or obstruct a public view of a “scenic resource” as defined.
- The project, if in an “urbanized area” per Public Resources Code, section 21071 conflicts with applicable zoning and other regulations governing scenic quality.
- The project, if in a non-urbanized area, substantially degrades the existing visual character or quality of the public view of the site and its surroundings.
- The project creates a new source of substantial light and glare that would adversely affect day or nighttime views in the area.

Staff reviewed the General Plan and zoning, aerial and street imagery, area maps, site and vicinity photographs; building elevations, drawings, renderings, and similar, and concluded project buildings, equipment, and structures would not be within a scenic vista and not eliminate or obstruct a public view of a scenic resource and would be concordant with the observable land use character, buildings and structures in the surrounding area.

The proposed project is in an urbanized area. The project conforms to the applicable city zoning and other regulations governing scenic quality.

Staff viewed aerial, surface and street imagery, topographic and other maps in addition to **Figures 6-1** and **6-2** and concludes the nearest EJ population would have no to low visibility of the project due to the existence of aboveground components in the existing physical environment (buildings, structures, earthworks, trees, etc.) obstructing or obscuring the public view of the project from the identified population(s).

⁶ Public Health concern discussed under Air Quality

The project design includes shielding, directional light, non-reflectance materials, and other light pollution and reflectance project design measures. No disproportionate impacts to an EJ population would occur.

Air Quality

Table 6-4 and **Table 6-5** include indicators that relate to both air quality and public health. The indicators that are associated with criteria pollutants such as ozone, fine particulate matter having a diameter of less than or equal to 2.5 microns (PM_{2.5}), and NO₂ are indicators related to air quality. Indicators that are associated with protecting public health are: Diesel PM, Pesticide Use, Toxic Release from Facilities, Traffic Density, Asthma ER Visits, Low Birth Weight Infants, and Cardiovascular Disease. Each of these air quality and public health indicators are summarized under this Air Quality subsection.

Ambient air quality standards (AAQS) are established to protect the health of even the most sensitive individuals in our communities, which includes the EJ population, by defining the maximum amount of a pollutant that can be present in outdoor air without harm to the public's health. Both the California Air Resources Board and the U.S. EPA are authorized to set ambient air quality standards. Since toxic air contaminants (TACs) have no AAQS that specify health-based levels considered safe for everyone, a health risk assessment (HRA) is used to determine if people might be exposed to those types of air pollutants at unhealthy levels.

Staff identified the potential air quality (i.e. ozone and PM_{2.5}) and public health impacts (i.e. cancer and non-cancer health effects) that could affect the EJ population represented in **Figures 6-1** and **6-2**. These potential air quality impacts and public health risks were evaluated quantitatively based on the most sensitive population, which includes the EJ population, by conducting an air quality impact analysis (AQIA) and an HRA. Please refer to **Section 5.3 Air Quality** for details. Staff also examined individual contributions of indicators in CalEnviroScreen that are relevant to air quality (see **Table 6-1**).

In **Section 5.3 Air Quality**, staff concluded that construction, operation (including readiness testing and maintenance), and any emergency operation as defined in the Air Quality section of this initial study are not likely to cause significant adverse impacts. Criteria pollutants would not cause or contribute to exceedances of health-based ambient standards and the project's toxic air emissions would not exceed health risk limits. Therefore, no mitigation is required for the project's operational emissions. Likewise, the project would not cause disproportionate air quality or public health impacts on sensitive populations, such as the EJ population represented in **Figures 6-1** and **6-2**.

Ozone Impacts. Ozone is known to cause numerous health effects, which can potentially affect EJ communities as follows:

- lung irritation, inflammation and exacerbation of existing chronic conditions, even at low exposures (Alexis et al. 2010, Fann et al. 2012, Zanobetti and Schwartz 2011);
- increased risk of asthma among children under 2 years of age, young males, and African American children (Lin et al., 2008, Burnett et al., 2001); and,
- higher mortality, particularly in the elderly, women and African Americans (Medina-Ramon, 2008).

For CalEnviroScreen, the air monitoring data used in this indicator have been updated to reflect ozone measurements for the years 2017 to 2019. CalEnviroScreen 4.0 uses the average daily maximum eight-hour ozone concentration (ppm). According to CalEnviroScreen data, ozone concentrations in each census tract are ordered by ozone concentration values and then are assigned a percentile based on the statewide distribution of values.

Results for ozone are shown in **Table 6-4**. Ozone levels in the census tracts within a six-mile radius of the project are relatively low, with percentiles around 10. Another way to look at the data is that approximately 90 percent of all California census tracts have higher ozone levels than these census tracts near the project. For ozone, the census tracts within a six-mile radius of the proposed project site are not exposed to high ozone concentrations compared to the rest of the state.

Even though ozone is not directly emitted from emission sources such as the backup generators, precursor pollutants that create ozone, such as nitrogen oxides (NOx) and volatile organic compounds (VOCs), would be emitted.

The project would not be expected to contribute significantly to the regional air quality as it relates to ozone. The project would be required to comply with air quality emission rate significance thresholds for NOx and VOCs, which are precursor pollutants that create ozone during the construction and testing and maintenance phases. The project would use best management practices (BMPs) during construction, which would reduce NOx and VOCs during construction. The project's impacts would not be expected to cause exceedance of ambient air quality standards during operation (including readiness testing and maintenance). NOx emissions resulting from readiness testing and maintenance would be high enough to trigger offset requirements due to Bay Area Air Quality Management District (BAAQMD) Regulation 2, Rule 2 and BAAQMD Policy for Emergency Backup Power Generators (BAAQMD 2019). However, NOx emissions would be fully offset through the permitting process by the BAAQMD through the Small Facility Banking Account. Please see more detailed discussion in **Section 5.3 Air Quality**.

Therefore, the project would not contribute significantly to regional ozone concentrations, relative to baseline conditions. The project's air quality impacts, as it

related to ozone and ozone precursors would be less than significant for the census tracts of concern and the general population.

Staff concludes that the project would not expose sensitive receptors to substantial ozone precursor concentrations. The project's ozone and ozone precursor air quality impacts would be less than significant for the local EJ community and the general population. Additionally, as NO_x emissions of the standby generators would be fully offset, the project would not result in a cumulatively considerable net increase of secondary pollutants such as ozone in the air basin.

PM2.5 Impacts. Particulate matter (PM) is a complex mixture of aerosolized solid and liquid particles including such substances as organic chemicals, dust, allergens and metals. These particles can come from many sources, including cars and trucks, industrial processes, wood burning, or other activities involving combustion. The composition of PM depends on the local and regional sources, time of year, location and weather.

PM2.5 refers to particles that have a diameter less than or equal to 2.5 micrometers. PM2.5 is known to cause numerous health effects, which can potentially affect EJ communities. Particles in this size range can have adverse effects on the heart and lungs, including lung irritation, exacerbation of existing respiratory disease, and cardiovascular effects.

For CalEnviroScreen, the indicator PM2.5 is determined by the annual mean concentration of PM2.5 (weighted average of measured monitor concentrations and satellite observations, $\mu\text{g}/\text{m}^3$), averaged over three years (2015-2017). According to CalEnviroScreen, PM2.5 concentrations for each census tract are ordered by PM2.5 concentration values and are then assigned a percentile based on the statewide distribution of values. The PM2.5 indicator percentiles are shown in **Table 6-4**. The PM2.5 indicators range between 24 and 29 percent for the seven census tracts within a six-mile radius of the project, with the highest percentile present in census tract 60012438203.

Census tract 60012438203 was at the 29.71 percentile in the PM2.5 category (see **Table 6-4**). This indicates that particulate matter concentrations in this census tract are lower than 70.29 percent of census tracts statewide. This indicates that these communities are exposed to below average PM2.5 concentrations compared to the rest of the state.

The project would not be expected to contribute significantly to the regional air quality related to PM2.5. The project would be required to comply with ambient air quality standards for particulate matter during construction and operations of the standby generators. The project would use BMPs during construction, which would reduce particulate matter during construction. The project is also expected to be below ambient air quality standards during readiness testing and maintenance

operations. The project would therefore be expected to not contribute significantly to regional PM_{2.5} concentrations, relative to baseline conditions. The project's air quality impacts, as it related to PM_{2.5} would be less than significant for the census tract of concern and the general population.

Staff concludes that the project would not expose sensitive receptors to substantial PM_{2.5} concentrations.

Diesel PM. This indicator represents how much diesel PM is emitted into the air within and near the census tract. The data are from 2016 California Air Resources Board's emission data from on-road vehicles (trucks and buses) and off-road sources (ships and trains, for example). This is the most recent data available with which to make the necessary comparisons.

Table 6-4 shows that among the seven census tracts within a six-mile radius of the project, four are higher than the 75th percentile. The highest percentiles are 99.63, 95.02, 93.50 and 77.66 (in census tracts 06001432501, 06001433200, 06001432400 and 06001437200, respectively), meaning they are higher than 99.63, 95.02, 93.50 and 77.66 percent of the census tracts in California. However, according to the results of the HRA conducted for this project in **Section 5.3 Air Quality**, impacts associated with diesel PM from the proposed project construction and operation activities (diesel-fueled equipment) would be less than significant; and therefore, would not have a significant cumulative contribution to the diesel PM levels in these disadvantaged communities.

Pesticide Use. Specific pesticides included in the Pesticide Use category were narrowed from the list of all registered pesticides in use in California to focus on a subset of 132 active pesticide ingredients that are filtered for hazard and volatility for the years 2017-2019 collected by the California Department of Pesticide Regulation. Only pesticides used on agricultural commodities are included in the indicator.

Table 6-4 shows that except for census tract 06001440301, which is at the 38.72 percentile, all other census tracts were at the 0 percentile in the Pesticide Use category. This indicates that pesticide use in these census tracts are below the statewide average in terms of pesticide use. This indicates that these communities are not exposed to high pesticide concentrations as compared to the rest of the state.

Toxic Releases from Facilities. This indicator represents modeled toxicity-weighted concentrations of chemical releases to air from facility emissions and off-site incineration in and near the census tract. The U.S. EPA provides public information on the amount of chemicals released into the environment from many facilities. This indicator uses the modeled air concentration and toxicity of the chemical to determine the toxic release score. The data are from 2017-2019.

Table 6-4 shows that all seven census tracts within a six-mile radius of the project are below the 75th percentile. Census tract 060014437101, which includes the proposed

project site, is at the 70.58 percentile in the Toxic Release Category. This indicates that toxic release from facilities in this census tract is higher than 70.58 percent of census tracts statewide.

According to the results of the HRA conducted for the project in **Section 5.3 Air Quality**, impacts associated with toxic releases from construction and operation activities (diesel-fueled equipment) would be less than significant. The project would not have a significant cumulative contribution to toxic releases. The project's toxics emissions would be less than significant for the local EJ community and the general population.

Traffic Impacts. This indicator represents the average traffic volumes per amount of roadways. It is calculated by dividing the traffic volumes by the total road length within and 150 meters around the census tract. The data is from 2017. Traffic impacts are related to the diesel PM emitted from diesel-fueled vehicles.

Table 6-4 shows that among the seven census tracts within a six-mile radius of the project, five are higher than the 75th percentile. The highest percentiles are 94.29, 91.48, 85.09, 84.01 and 79.68 (in census tracts 06001433200, 06001432501, 06001437101, 06001432400 and 06001440301, respectively), meaning they are higher than 94.29, 91.48, 85.09, 84.01 and 79.68 percent of the census tracts in California. Traffic impacts are related to the diesel PM emitted from diesel-fueled vehicles. However, according to the results of the HRA conducted for the project in **Section 5.3 Air Quality**, impacts associated with diesel PM from the proposed project construction and operation activities (diesel-fueled equipment) would be less than significant; and therefore, would not have a significant cumulative contribution to the diesel PM-related traffic density in this disadvantaged community.

Asthma. This indicator is a representation of an asthma rate. It measures the number of emergency department (ED) visits for asthma per 10,000 people over the years 2015 to 2017. The information was collected by the California Office of Statewide Health Planning and Development.

Table 6-5 shows that among the seven census tracts within a six-mile radius of the project, six are higher than the 75th percentile in the Asthma category. The highest percentiles are 93.99, 91.19, 90.09, 89.48, 83.13 and 82.13 (in census tracts 06001438203, 06001437200, 06001437101, 06001433200, 06001432501 and 06001432400, respectively), meaning these are higher than 93.99, 91.19, 90.09, 89.48, 83.13 and 82.13 percent of the census tracts in California for asthma ED visits.

According to the results of the HRA conducted for the project in **Section 5.3 Air Quality**, impacts associated with TACs from the proposed project construction and operation activities would be less than significant; and therefore, would not have a significant cumulative contribution to asthma ED visits. The project's emissions would

not have a significant cumulative contribution to asthma ED visits for the local EJ community and the general population.

Low Birth Weight Infants. This indicator measures the percentage of babies born weighing less than 2500 grams (about 5.5 pounds) out of the total number of live births over the years 2009 to 2015. The information was collected by the California Department of Public Health (CDPH).

Table 6-5 shows that among the seven census tracts within a six-mile radius of the project, five are higher than the 75th percentile in the Low Birth Weight category. The highest percentiles are 96.39, 89.27, 88.85, 86.54 and 81.22 (in census tracts 06001438203, 06001432400, 06001440301, 06001432501 and 06001437101, respectively), meaning the percent low birth weight is higher than 96.39, 89.27, 88.85, 86.54 and 81.22 percent of the census tracts in California. This indicates that these communities have lower birth weight compared to the rest of the state.

Staff's HRA for the project was based on a highly conservative health-protective methodology that accounts for impacts on the most sensitive individuals in a given population. According to the results of the assessment, the risks at the nearest sensitive receptors (i.e. Maximum exposed individual sensitive [MEIS] receptor and Maximum exposed individual resident [MEIR] receptor) are below health-based thresholds. Therefore, the toxic emissions from the project would not cause significant health effects for the low birth weight infants in these disadvantaged communities or have a significant cumulative contribution to these disadvantaged communities.

Cardiovascular Disease. This indicator represents the rate of heart attacks. It measures the number of ED visits for acute myocardial infarction (AMI) (or heart attack) per 10,000 people over the years 2015 to 2017.

Table 6-5 shows that among the seven census tracts within a six-mile radius of the project, three are higher than the 75th percentile. The highest percentiles are 90.15, 80.96 and 78.12 (in census tracts 06001438203, 06001437200 and 06001437101, respectively), meaning they are higher than 90.15, 80.96 and 78.12 percent of the census tracts in California. This indicates the number of emergency department visits for AMI per 10,000 people over the years 2015 to 2017 is higher than 90.15, 80.96 and 78.12 percent of census tracts in California. This also indicates that these communities are above the average number of emergency department visits for AMI compared to the rest of the state.

According to the results of the HRA conducted for the project in **Section 5.3 Air Quality**, impacts associated with emissions from construction and operation activities would be less than significant; and therefore, would not have a significant cumulative contribution to cardiovascular disease. The project's emissions would not have a significant cumulative contribution to cardiovascular disease for the local EJ community

and the general population. No disproportionate impacts to an EJ population would occur.

Cultural and Tribal Cultural Resources

At least one California Native American household lives within six miles of the project. No cultural or tribal cultural resources of concern to California Native American tribes have been identified on the project site. As discussed in **Section 5.5 Cultural and Tribal Cultural Resources** the mitigation measures **CUL-1** through **CUL-4** would reduce any inadvertent, construction-related impacts on buried cultural or tribal cultural resources to a less-than-significant level. Therefore, cultural and tribal cultural resource impacts would not result in disproportionate impacts on an EJ population.

Hazards and Hazardous Materials

EJ populations may experience disproportionate hazards and hazardous materials impacts if the storage and use of hazardous materials within or near EJ communities occur to a greater extent than within the community at large. However, a disproportionate impact upon the EJ population resulting from the planned storage and use of hazardous materials on the site is extremely low. Diesel fuel to run the emergency generators is the hazardous material that the project site would have in greatest quantity. The total quantity would be divided up and stored in many separate double-walled fuel tanks (one for each generator) with proper spill controls. Therefore, the likelihood of a spill of sufficient quantity to impact the surrounding community and EJ population would be very unlikely, thus the impact on the EJ community would not be disproportionate.

Hydrology and Water Quality

A disproportionate hydrologic or water quality impact on an EJ population could occur if the project would contribute to drinking water degradation, exacerbate groundwater contamination, or discharge additional pollutants to impaired surface water bodies. Since the overall CalEnviroScreen score reflects the collective impacts of multiple pollutants and factors, staff examined the individual contributions to indicators as they relate to hydrology and water quality. The pollutants of concern in this analysis are those from construction and operational activities. The CalEnviroScreen scores for the disadvantaged community census tracts in a six-mile radius of the project (see **Figure 6-1**) are presented in **Table 5.12-4** for each of the following environmental stressors that relate to hydrology and water quality: Drinking Water Contaminants, Groundwater Threat, and Impaired Water Bodies. The percentile for each disadvantaged census tract reflects its relative ranking among all of California's census tracts.

CalEnviroScreen assigns a score to each type of stressor. To assess the impact of a stressor on population within a census tract, the score is assigned a weighting factor that decreases with distance from the census tract. For stationary stressors related to hydrology or water quality, the weighting factor diminishes to zero for distances larger than 1,000 meters (0.6 mile). As **Figure 6-1** shows, all but one of the assessed census

tracts are more than 1,000 meters away from the project. The only census tract that is within 1,000 meters of the proposed project site is tract 6001437101, the census tract in which the project would be located. Therefore, this analysis focuses on that census tract.

Drinking Water Contaminants. Low income and rural communities, particularly those served by small community water systems, can be disproportionately exposed to contaminants in their drinking water. CalEnviroScreen aggregates drinking water quality data from the California Department of Public Health, the U. S. EPA, and the California State Water Resources Control Board (SWRCB). The score provided by the Drinking Water Contaminant metric calculation is intended to rank water supplies relative to their history or likelihood to provide water that exceeds drinking water standards. Census tract 6001437101 was at about the seven percentile in the Drinking Water Contaminants indicator (see **Table 6-4**). This indicates that the drinking water contamination threat in this census tract is extremely low, and that this community is not exposed to contaminants through drinking water. The city of Hayward receives water from two sources, both supplied by the San Francisco Public Utilities Commission (SFPUC): 85 percent from the Hetch-Hetchy reservoir in the Sierra Nevada mountains and 15 percent from local reservoirs. Therefore, the project would not contribute degrade the drinking water for the census tract of concern and the general population.

Groundwater Threats. Common groundwater pollutants found at leaking underground storage tank and cleanup sites in California include gasoline and diesel fuels, chlorinated solvents and other volatile organic compounds such as benzene, toluene, and methyl tert-butyl ether; heavy metals such as lead, chromium and arsenic; polycyclic aromatic hydrocarbons; persistent organic pollutants like polychlorinated biphenyls; Dichlorodiphenyl-trichloroethane and other insecticides; and perchlorate. CalEnviroScreen aggregates data from the SWRCB's GeoTracker website about groundwater threats. The score provided by the Groundwater Threat metric calculation is intended to rank the relative risk of environmental contamination by groundwater contamination, within each census tract.

Census tract 6001437101 was at the 98 percentile in the Groundwater Threat indicator (see **Table 6-4**). This indicates that groundwater contamination threats in this census tract are within the top five percent of tracts statewide and that this community is located alongside a relatively high proportion of groundwater threats.

The project would not contribute significantly to groundwater degradation, relative to existing conditions. The project would be required to comply with the Clean Water Act (CWA) by controlling the discharge of pollutants during its construction and operation phases. The project would implement modern operational phase stormwater and containment controls that would improve upon the site's potential to release contaminants to groundwater. The project's hydrology and water quality impacts would be reduced to less than significant for the census tract of concern and the general population.

Impaired Water Bodies

Rivers, lakes, estuaries and marine waters in California are important for many different uses. Water bodies used for recreation may also be important to the quality of life of nearby residents if subsistence fishing is critical to their livelihood. Water bodies also support abundant flora and fauna. Changes in aquatic environments can affect biological diversity and overall health of ecosystems. Aquatic species important to local economies may be impaired if the habitats where they seek food and reproduce are changed. Additionally, communities of color, low-income communities, and tribes generally depend on the fish, aquatic plants, and wildlife provided by nearby surface waters to a greater extent than the general population. CalEnviroScreen aggregates data from the SWRCB's Final 2012 California Integrated Report (CWA Section 303(d) List / 305(b) Report). The score provided by the Impaired Water Bodies metric calculation is intended to rank the relative risk of impaired water bodies, within each census tract.

Census tract 6001437101 was at the 87 percentile, in the Impaired Water Bodies indicator (see **Table 6-4**). This indicates that impaired water bodies in this census tract within the top 15 percent of tracts statewide in terms of relative abundance.

The project would not contribute significantly to the impairment of local or regional water bodies. The project would be required to comply with the CWA by controlling the discharge of pollutants during its construction and operation phases. Also, the project would implement modern operational phase stormwater and containment controls that would improve upon the site's potential to release contaminants to the environment. The project would therefore provide a long-term benefit to local and regional water bodies, relative to baseline conditions. The project's hydrology and water quality impacts would be reduced to less than significant for the census tract of concern and the general population. No disproportionate impacts to an EJ population would occur.

Noise

EJ populations may experience disproportionate noise impacts if the siting of unmitigated industrial facilities occurs within or near EJ communities to a greater extent than within the community at large. The project site is within an area having an EJ population. The area surrounding the site is primarily commercial and industrial uses. The closest sensitive receptor is a residence located about 3,300 feet to the east-northeast of the project site.

Construction activities would increase existing noise levels at the adjacent land uses, but they would be temporary and intermittent. However, the noise level at the closest residence due to the construction activities would remain below the existing ambient noise level. In addition, the City of Hayward General Plan limits the hours of construction activities to 7:00 A.M. to 7:00 P.M. Mondays through Saturdays, and 10:00 A.M. to 6:00 P.M. Sundays and holidays. While construction of the proposed project would temporarily increase noise levels in the immediate neighboring areas of the

project site, since there are no noise-sensitive land uses in the immediate vicinity of the project (the closest residence is about 3,300 feet away), construction activities would not result in a disproportionate impact for the EJ community.

Sources of operational noise for the project would include the backup gensets, roof-top HVAC units, roof-top cooling fans, and other equipment necessary for project operation. The City's General Plan and Municipal Code establish noise standards to regulate noise impacts. The General Plan outlines exterior noise standards for various land uses including residential, commercial, and industrial areas. Moreover, Sections 4-1.03.1 and 4-1.03.4 of the Municipal Code limit noise levels at any point outside the boundaries of commercial and industrial properties. Since the General Plan's limits are more conservative than the Municipal Code's, they are taken as the threshold for evaluating project noise levels. During both normal operation and genset testing, noise levels at the closest residence due to the operation would remain below the existing ambient noise level and within the City's noise limits. Since the project is not adjacent to, or in close proximity to a residential land use, noise reduction measures, such as mechanical equipment screening, would not be required and operation of the project would have a less than significant impact from mechanical equipment noise for all the area's population, including the EJ population. No disproportionate impacts to an EJ population would occur.

Transportation

Significant reductions in transportation options may significantly impact EJ populations. In particular, an impact to bus transit, pedestrian facilities, or bicycle facilities could cause disproportionate impacts to low-income communities, as low-income residents more often use these modes of transportation. Construction of the project may require temporary lane closure/blockage that may interfere with the designated Class II bike lane on the roadway. Depending on the extent of the encroachment into the right-of-way, temporary traffic controls could be implemented, including detour and signage, would be provided to ensure vehicles and bicyclists could reach their intended destinations safely. As concluded in **Section 5.17 Transportation**, all transportation impacts, including impacts to alternative modes of transportation, would be less than significant. No disproportionate impacts to an EJ population would occur.

Utilities and Service Systems

A disproportionate utilities and system services impact on an EJ population could occur if the project wastes impacted the disadvantaged community such as contributing to or exacerbating the effects of cleanup sites, hazardous waste generators and facilities, and solid waste facilities.

Since the overall CalEnviroScreen score reflects the collective impacts of multiple pollutants and factors, staff examined the individual contributions to indicators as they relate to wastes addressed under utilities and system services. The wastes of concern in this analysis are those from construction and operational activities. The handling and

disposal of each type of waste depends on the hazardous ranking of its constituent materials. Existing laws, ordinances, regulations, and standards ensure the desired handling and disposal of waste materials without potential public or environmental health impacts.

The CalEnviroScreen scores for the disadvantaged community census tracts in a six-mile radius of the project (see **Figure 6-1**) are presented in **Table 6-4** for each of the following environmental stressors that relate to waste management: cleanup sites, hazardous waste generators and facilities, and solid waste facilities. The percentile for each disadvantaged census tract reflects its relative ranking among all of California's census tracts.

CalEnviroScreen assigns a score to each indicator of stressors. To assess the impact of a stressor on population within a census tract, the score is assigned a weighting factor that decreases with distance from the census tract. For stationery stressors, the weighting factor diminishes to zero for distances larger than 1,000 meters (0.6 mile). As **Figure 6-1** shows, all but one of the assessed census tracts are more than 1,000 meters away from the project. The only tract that is within 1,000 meters of the proposed project site is tract 6001437101, the tract in which the project would be located. Therefore, this analysis focuses on that tract.

Cleanup Sites. This indicator is calculated by considering the number of cleanup sites including Superfund sites on the National Priorities List (NPL), the weight of each site, and the distance to the census tract. Sites undergoing cleanup actions by governmental authorities, or by property owners, have suffered environmental degradation due to the presence of hazardous substances. Of primary concern is the potential for people to come in contact with these substances. The percentile score in the cleanup sites indicator for the only census tract within 1,000 meters of the project site (tract 6001437101) is 99 (see **Table 6-4**). The interpretation is that contamination threats due to the presence of cleanup sites in this census tract are among the highest of all tracts statewide. This is an indication that the communities within that tract are located alongside a relatively high proportion of cleanup sites.

If there is any existing contamination at the project site, it would be remediated by the current owner in accordance with regulatory requirements that would ensure there would be no impacts to on- or off-site receptors. In addition, the project owner would have to comply with appropriate laws, ordinances, regulations, and standards that would require additional cleanup of contaminated soils and groundwater that might be encountered during construction and operation activities. Therefore, the project would not contribute significantly to the effects from cleanup sites for the relevant census tract and for the general population.

Hazardous Waste Generators and Facilities. This indicator is calculated by considering the number of permitted treatment, storage, and disposal facilities (TSDFs) or generators of hazardous waste, the weighting factor of each generator or site, and

the distance to the census tract. Most hazardous waste must be transported from hazardous waste generators to permitted TSDFs by registered hazardous waste transporters. Most shipments must be accompanied by a hazardous waste manifest. There are widespread concerns for both human health and the environment from sites that serve for the processing and disposal of hazardous waste. Newer facilities are designed to prevent the contamination of air, water, and soil with hazardous material. However, even newer facilities may negatively affect perceptions of surrounding areas in ways that have economic, social, and health impacts.

The percentile score in the hazardous waste generators and facilities indicator for census tract 6001437101 that includes the project site is 99. The interpretation is that this census tract is among the worst of all tracts statewide in terms of threats related to hazardous waste generation and facilities, meaning that the communities in that tract are located alongside sites with a high relative proportion of hazardous waste generators and facilities.

The project would not contribute significantly to hazardous waste generation or to the number or size of facilities handling hazardous waste processing. Further, the project would be required to comply with appropriate laws, ordinances, regulations, and standards to control storage and disposal of hazardous waste during its construction and operation phases. The project would implement modern operational phase controls to prevent or reduce the generation of hazardous wastes and to dispose of them in a manner that would minimize impacts to the environment both during project construction and operation. The project's impacts related to hazardous waste generation and disposal would be reduced to less than significant for the relevant census tract and the general population.

Solid Waste Facilities

This indicator is calculated by considering the number of solid waste facilities including illegal sites, the weighting factor of each, and the distance to a census tract. Newer solid waste landfills are designed to prevent the contamination of air, water, and soil with hazardous materials. However, older sites that are out of compliance with current standards or illegal solid waste sites may degrade environmental conditions in the surrounding area and pose a risk of exposure. Other types of facilities, such as composting, treatment, and recycling facilities may raise concerns about odors, vermin, and increased traffic.

The percentile score in the solid waste facilities indicator for census tract 6001437101 that includes the project site is nine (see **Table 6-4**). The interpretation is that the number and type of facilities within or nearby this census tract, as well as the environmental deterioration due to the presence of these facilities, are in the lowest 10 percent of the census tracts in California.

Solid waste generated during construction and operation of the project would be segregated, where practical, for recycling, and disposed where there is adequate

capacity for disposal of nonhazardous waste. Also, the project would be required to develop and implement plans that would ensure proper disposal of nonhazardous waste at appropriately licensed facilities. The project owner would use solid wastes sites or facilities that are verified to be comply with current laws, ordinances, regulations, and standards. In addition, there would be no increase of solid waste generators and facilities in the area due to project construction or operation because there is adequate space for disposal of waste from the project. Therefore, there would be no impact due to solid waste facilities that would disproportionately impact an EJ community in the relevant census tract.

6.3 References

- Alexis NE et al. 2010 – Alexis NE, Lay JC, Hazucha M, Harris B, Hernandez ML, Bromberg PA, et al. Low-level ozone exposure induces airways inflammation and modifies cell surface phenotypes in healthy humans. *Inhal Toxicol* 22(7):593-600. Accessed online at: <https://www.ncbi.nlm.nih.gov/pubmed/20384440>
- BAAQMD 2019 – Bay Area Air Quality Management District (BAAQMD). Calculating Potential to Emit for Emergency Backup Power Generators. Dated June 3, 2019. Accessed online at: http://www.baaqmd.gov/~media/files/engineering/policy_and_procedures/banking-and-offsets/calculating-pte-for-emergency-generators-06032019-pdf
- BAAQMD 2023 – Bay Area Air Quality Management District (BAAQMD). Community Air Risk Evaluation Program. Accessed on January 2023. Accessed online at: <https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program>
- BAAQMD 2021 – Bay Area Air Quality Management District (BAAQMD). AAQMD Regulation 2-1-243 Overburdened Community. Accessed online at: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0201-pdf.pdf?la=en
- Burnett RT et al. 2001 – Burnett RT, Smith-Doiron M, Stieb D, Raizenne ME, Brook JR, et al. Association between Ozone and Hospitalization for Acute Respiratory Diseases in Children Less than 2 Years of Age. *American Journal of Epidemiology* 153(5):444-452. Accessed online at: <https://academic.oup.com/aje/article/153/5/444/149769>
- CalEPA 2022a – California Environmental Protection Agency (CalEPA). *Final Designation of Disadvantaged Communities Pursuant to Senate Bill 535*, May 2022. Accessed online at: https://calepa.ca.gov/wp-content/uploads/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf.
- CalEPA 2022b – California Environmental Protection Agency (CalEPA). SB 535 Excel Spreadsheet and data dictionary, last updated May 2022. Accessed online at: <https://oehha.ca.gov/calenviroscreen/sb535>

- CARB 2023 – California Air Resources Board (CARB). Community Air Protection Selection Process. Accessed January 2023. Accessed online at: <https://ww2.arb.ca.gov/community-air-protection-program>
- CDE 2024 – California Department of Education (CDE). California Department of Education Educational Demographics Unit, Data Quest, Selected District Level Data - 0161150- Alameda County for the year 2023-24. Free or Reduced Price Meals. Accessed online at: <https://dq.cde.ca.gov/dataquest/CNRA> 2024 - California Natural Resources Agency (CNRA). *Environmental Justice Policy*. Accessed online at: <https://www.conservation.ca.gov/Documents/Environmental%20Justice%20Policy%20-%20CNRA.pdf>
- Fann N et al. 2012 – Fann N, Lamson AD, Anenberg SC, Wesson K, Risley D, Hubbell BJ, Estimating the National Public Health Burden Associated with Exposure to Ambient PM_{2.5} and Ozone. *Risk Analysis* 32(1):81- 95. Accessed online at: <https://www.ncbi.nlm.nih.gov/pubmed/21627672>
- Lin S et al. 2008 – Lin S, Liu X, Le, LH, Hwang, S, Chronic Exposure to Ambient Ozone and Asthma Hospital Admissions among Children. *Environ Health Perspect* 116(12):1725-1730. Accessed online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2599770/>
- Medina-Ramón M, Schwartz J 2008 – Who is more vulnerable to die from ozone air pollution? *Epidemiology* 19(5):672-9. Accessed online at: <https://www.ncbi.nlm.nih.gov/pubmed/18480732>
- OEHHA 2021 – California Environmental Protection Agency's Office of Environmental Health Hazard and Assessment (OEHHA). CalEnviroScreen 4.0, October 2021. Accessed online at: <https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>
- U.S. Census 2020 – United States Census Bureau (U.S. Census). PL-Race, Hispanic or Latino, Age, and Housing Occupancy: 2020 – DEC Redistricting Data (Public Law 94-171) Summary File, Tables P1, P2, P3, P4, H1. Accessed online at: <https://www.census.gov/data.html>
- U.S. EPA 2015 – United States Environmental Protection Agency (U.S. EPA). Guidance on Considering Environmental Justice During the Development of Regulatory Actions, May 2015. Accessed online at: <https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action>
- Zanobetti A, Schwartz J 2011 – Ozone and survival in four cohorts with potentially predisposing diseases. *Am J Respir Crit Care Med* 184(7):836-41. Accessed online at: <https://www.ncbi.nlm.nih.gov/pubmed/21700916>

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Appendix A

Project's Jurisdictional and Generating Capacity Analysis

Appendix A: Project's Jurisdictional and Generating Capacity Analysis

The SVY03A Data Center Campus (SVY03A or project) proposed by STACK Infrastructure would include 28 diesel-fueled standby emergency backup generators (gensets) that would provide emergency backup power supply for the project only during interruptions of electric service delivered via Pacific Gas and Electric (PG&E) transmission lines. The gensets would be electrically isolated from the PG&E electrical transmission system with no means to deliver electricity offsite of SVY03A (the distribution line would only allow power to flow in one direction—from PG&E electrical transmission line to the project).

There are no other STACK Infrastructure-owned data centers in the city of Hayward. The nearest STACK Infrastructure-owned data center, SVY02, is located in the city of San Jose. There would be no common facilities between SVY03A and this facility or any other STACK Infrastructure data center. Therefore, the project is considered an independent data center for the purpose of jurisdictional determination.

The maximum generating capacity of the entire gensets generation yards would not exceed 72.6 MW. This includes the critical information technology (IT) load of the servers and server bays, the cooling load of the IT servers and bays, and the facility's ancillary electrical and telecommunications equipment operating loads to support the data customers and campus.

The California Energy Commission (CEC) is responsible for reviewing, and ultimately approving or denying, all applications for thermal electric power plants that are 50 MW and greater being proposed for construction in California. (Pub. Resources Code, § 25500.) The CEC has a regulatory process, referred to as the Small Power Plant Exemption (SPPE) process, that allows applicants with projects between 50 and 100 MW to obtain an exemption from the CEC's jurisdiction and from obtaining a CEC certificate and instead proceed with local approval if the CEC finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. (Pub. Resources Code, § 25541.)

CEC staff (staff) evaluated the net deliverable or useable electricity capacity of SVY03A gensets and confirms that it is more than 50 MW and less than 100 MW, qualifying the project for a SPPE under the capacity criterion. The following provides a summary of the factors supporting this conclusion:

1. The diesel-fueled reciprocating engine gensets use a thermal energy source.
2. The gensets and the associated project equipment that they would support would all be located on a common property under common ownership sharing common utilities, and the 28 gensets should be aggregated and considered as one thermal power generating facility with a generation capacity of greater than 50 MW.

3. Jurisdictional analyses are based on the net MWs that can be delivered for “use” (i.e., to a data center facility or the electricity grid), not the gross or nameplate rating. Net capacity ratings are never larger than gross capacity ratings. This project’s maximum gross and nameplate capacity ratings, including all the redundant gensets, would not even reach 100 MWs (72.6MW) and therefore, its maximum net capacity would also be less than 100 MW and would not exceed 72.6 MW.
4. The gensets would be exclusively connected to the SVY03A building and would not be capable of delivering electricity to any off-site user or to the electrical transmission grid. The proposed redundancies built into the design of the facility are to ensure performance reliability.
5. To make a jurisdictional recommendation, staff assessed the generating capacity of the project, using the following:

1. SVY03A is a thermal power plant under the statutory definition.

The Warren-Alquist State Energy Resources Conservation and Development Act (Public Resources Code, section 25000 et. seq) defines a thermal power plant “as any stationary or floating electrical generating facility using any source of thermal energy, with a generating capacity of 50 megawatts or more, and any facilities appurtenant thereto.” (Pub. Resources Code, § 25120.) SVY03A’s backup generating facilities would be made up of gensets that use diesel engines to convert the thermal energy in the renewable diesel fuel¹ into electricity via a rotating generator, and, thus, each genset is an electrical generating device that uses a source of thermal energy. The facility proposes to use 28 such gensets to service SVY03A.

SVY03A’s 28 gensets, and the associated data center building that they would support, would all be located on a common property under common ownership sharing common utilities. The gensets would operate to provide backup electricity to the project when its connection to the grid is lost. The genset system configuration includes two completely redundant gensets and 26 primary gensets. This configuration allows for a transition of power load in the event of a primary generator failure. All the gensets at the project would share a common trigger for operation during an emergency: the transfer switch isolating SVY03A from the grid. Thus, because the project is stationary, under common ownership sharing common utilities, uses a fuel source to generate thermal energy, and has a generating capacity of more than 50 MW, the project meets the statutory definition of a thermal power plant.

Please note that the total generating capacity of this data center, including the redundant gensets, would be below 100 MW. So, even if all the primary and redundant

¹ Renewable diesel fuel is composed of a mixture of hydrocarbons, containing chemical energy. When ignited, this chemical energy is converted to thermal energy.

gensets operate at full load simultaneously, the project's generating capacity would remain below 100 MW. This alone qualifies this project for a SPPE.

2. California Code of Regulations, Title 20, section 2003 requires the generating capacity to be the net generating capacity.

California Code of Regulations, Title 20, section 2003 specifies how the CEC calculates "generating capacity" for jurisdictional determinations, including the 50 MW threshold for the definition of a thermal power plant under Public Resources Code, section 25120. For SVY03A, the net generating capacity of the project, including the primary and redundant gensets combined would be 72.6MW.

The previous SPPE data center projects evaluated by the CEC in recent years were designed with a maximum installed nameplate capacity of over 100 MW with their redundant engines included. Their maximum capacity when considering only the primary gensets was below 100 MW but more than 100 MW when redundant engines were added. For those projects, staff explained that the simultaneous operation of the primary and redundant gensets would not result in generating more than 100 MW because it would be physically impossible for the gensets to generate more electricity than the building require since the facility's load demand is hardwired through various control systems. Generating more than 100 MW would damage components or at a minimum, isolate the project loads from the gensets. The primary and redundant engines together would never generate more than 100 MW even though the planned installed capacity on those projects site was more than 100 MW.

Again, SVY03A is different in that both the gross and net capacities are below 100 MW, even when considering the combined MW capacities of all the primary and redundant gensets operating at full load simultaneously. SVY03A qualifies for a SPPE.

References

DayZenLLC 2023a – DayZenLLC (TN 252249). STACK SVY03A – SPPE Application – Main App, Part I of VI, dated September 14, 2023. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024I – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

Appendix B

Project Substation, Pacific Gas and Electric
Company Electrical Service Details, and
Emergency Operations

Appendix B: Project Substation, Pacific Gas and Electric Company Electrical Service Details, and Emergency Operations

This appendix includes a discussion of the Pacific Gas and Electric Company's (PG&E) electrical system reliability (including supporting information) and emergency operations.

Electrical System Reliability

Apart from readiness testing and maintenance, the backup generators are designed to operate only when the electric system is unable to provide power to the data center. To understand the potential for the backup generators to operate during emergencies, one needs to know the conditions under which the electric system is unable to provide power to the data center. There are essentially four conditions that might result in the operation of the backup generators:

1. A fault occurs (power supply interruption) or planned maintenance is required on the equipment interconnecting the data center to the PG&E grid and the data center's electricity needs cannot be met.
2. An outage or fault occurs on the utility transmission system and PG&E is unable to provide power to the data center.
3. A Public Safety Power Shutoff (PSPS) impacts the utility transmission system and the data center is not able to receive power from PG&E.
4. An energy shortage crisis similar to the one in late Summer 2020 and the most recent heat waves where the utility (e.g. PG&E) is unable to supply electricity to the data center or the data center operators voluntarily disconnect from the utility and relies on backup generators to provide the needed electricity.
5. Due to the design of the data center interconnection with PG&E, the design of the PG&E transmission network, and the historical and expected impacts of PSPS, staff expects the backup generators would only be used in rare events outside of testing and maintenance.

The proposed data center interconnection to PG&E includes redundant facilities that would allow the data center energy needs to be met without use of the backup generators even when maintenance is required on the transmission system. Thus, transformer or transmission line maintenance could be performed without interrupting the supply of electricity from PG&E.

To support the total electricity demands of the project, the PG&E Grant-Eastshore 115 kV overhead transmission line would be extended and looped into the new PG&E switchyard.

Three optional routes have been identified for the looped in line (DayZen 2024I):

1. Approximately 300-foot-long, 115 kV overhead double circuit with single-circuit each way, looped into and out of the PG&E new switchyard. The 115 kV line would be supported by approximately two new tubular steel poles (TSP) one pole approximately 80 feet tall and the other 70 feet tall TSP. In addition, one or two approximately 35-foot-tall take-down structures would be installed immediately outside of PG&E switchyard.
2. Approximately 1800-foot-long, 115 kV overhead double circuit line with single-circuit each way, looped into and out of the PG&E new switchyard. The 115 kV line would be supported by approximately four to five new TSP ranging in 70 feet to 120 feet tall. One or two approximately 35-foot-tall take-down would be installed immediately outside of the new PG&E switchyard.
3. Approximately 300-foot-long, 115 kV overhead double circuit line with single circuit each way, looped into and out the new PG&E new switchyard. The 115 kV line would be supported by approximately two new TSP ranging in 70 feet to 120 feet tall TSP. One or two approximately 35-foot-tall take-down would be installed immediately outside of the new PG&E switchyard.

The new switchyard would be configured in breaker-and-a-half arrangement consisting of six 115 kV circuit breakers, steel structures, 115 kV switches metering devices, and a non-occupied control enclosure. Two 115 kV overhead 795 aluminum conductor steel supported (ACSS) conductors would be connected to the project substation.

The project substation is designed to include two 75 MVA (115/34.5 kV) step-down transformers when only one is required to supply the full loads of the data center.

The California ISO and PG&E are responsible for the reliability of the transmission network and are required to maintain compliance with national, regional, state and local standards. These standards are complicated but, generally speaking, they require that no loads be dropped, or customers shut off, when any single element of the bulk electric system is forced out of service. For the project, this means that PG&E should be able to supply power whenever any single part of the transmission system is out of service, sometimes called an N-1 or single contingency condition. This is the equivalent of, at a minimum, providing a looped system for the project.

For the last 4 years (2019-2022), the PG&E Grant-Eastshore #1 line between 2019 to 2020 has recorded two outages with a collective outage duration of 233 minutes. The Grant-Eastshore #2 line has recorded two outages (one outage in 2020 and one outage in 2022) with a collective outage duration of 568 minutes. None of these outages were due to PSPS events.

Based on the information provided by PG&E, the project would not have experienced a power interruption over the last 4 years since the project would have power coming from both Grant Substation and/or Eastshore Substation.

Wildfire policies could impact PG&E's ability to supply power to the project if curtailments on the transmission system interrupt supplies to both Grant Substation and the Eastshore Substation. A PSPS essentially de-energizes power lines in order to prevent the lines from causing or being damaged by wildfires. The PSPSs to date have been generally limited to high fire risk zones and only implemented under special conditions. A line de-energization in one of PG&E's high-risk fire zones to reduce the risk of lines causing a wildfire could reduce the electricity transmission access and supply to the project substation.

The past PSPS events have de-energized power in less populated areas. The project site would be located in the urban center of Hayward, there have not been outages due to PSPS events. In addition, power serving the project would come from either the Grant or Eastshore substations if either one the 115 kV lines is out of service. It is unlikely that a PSPS event would result in both 115 kV lines being taken out of service.

The future impacts of safety shutoffs on the PG&E system are not currently known – to date, the most recent broadly implemented PSPSs in PG&E service territory had no impact on the Grant and Eastshore substations. As the utilities and regulators try to balance the costs and benefits of PSPS by fine tuning and targeting the implementation, the mostly likely outcome is that future PSPS events will have even fewer potential effects on PG&E's territory.

As stated in the Supplemental Responses to CEC Data Requests Set 1 (DayZenLLC 2024a), dated February 2024, "PG&E has conducted a preliminary study to identify potential impacts from STACK's interconnection request for service. PG&E has identified potential thermal impacts to PG&E Transmission system from STACK's interconnection and it is possible that all can potentially require upgrades and are listed in Table 3.1 included in Attachment PD DR-23. Please note some of the upgrades are needed 5 years from today or beyond, for which PG&E may not have the exact mitigation developed yet and therefore is only requiring monitoring. For the P5 mitigations that are required by 2027, Eastshore 230 kV non-redundant relay mitigation is identified in 2023 Expansion Plan and therefore would be completed by PG&E as part of its approved expansion activities."

CEC staff expects the project's backup generators to be required to supply data center loads only rarely due to utility outages or certain onsite electrical equipment interruptions or failure. The PG&E system can supply power to the data center from both Grant and Eastshore substations by implementing the required upgrades of the transmission system. These interconnections make the energy supply to the data center at least as reliable as a looped system but likely even more reliable. Finally, PSPS events have not impacted customers directly connected to these two substations and as we expect the effects of PSPS events to decrease over time we do not think this will be an issue for the project going forward.

Energy shortages, like those that occurred on two occasions in 2020, could prevent a

utility from supplying the data center electricity needs and the data center would then rely on backup generators. In 2021, the California Public Utilities Commission (CPUC) adopted a new pilot program (D.21-03-056 and D.21-12-015), currently in effect through 2025, which ordered PG&E, Southern California Edison and San Diego Gas and Electric to administer the Emergency Load Reduction Program (ELRP). The CPUC issued a decision (D.23-12-005) updating policies for Demand Response (DR) programs (which include the ELRP) for the years 2024 through 2027 (CPUC 2023). However, because the project is located in a Disadvantaged Community (DAC), as specified by Senate Bill 535 (De León, Statutes of 2012), and diesel-fired generators are considered a prohibited resource under CPUC Decision D.16-09-056 (CPUC 2016), participation of the project in the ELRP would be prohibited even if a Governor's Executive Order is issued allowing the use of prohibited resources during an ELRP event to achieve incremental load reduction (CPUC 2021b, p. 42). Therefore, the project would not participate in the ELRP or any other DR programs.

Emergency Operations

Historical Power Outage Frequency

This section reviews information on the likelihood of an interruption of the electrical supply that would trigger emergency operations of the project's standby generators.

Pursuant to CPUC requirements, PG&E annually publishes a review of its system reliability. In the report covering 2023¹, "major event days" contributed to extended durations of outages. Average customer outages were 669.2 minutes per customer (System Average Interruption Duration Index or SAIDI), which is the amount of time the average PG&E customer experienced a sustained outage or outages (being without power for more than five minutes). Outages were shorter in the project area. When considering only the portion of PG&E's system within its East Bay Division, outages were 412.6 customer-minutes (SAIDI). This indicates that Hayward area customers experience outages that are shorter in duration than the system-wide average. For the frequency of PG&E's customers experiencing outages in 2023 (shown as System Average Interruption Frequency Index or SAIFI), PG&E shows, on average, outages occurred 2.065 times in the year for all customer types. The transmission system index (0.185 SAIFI in 2023) demonstrates a much higher reliability for transmission service when compared with the combination of transmission and distribution system service.

BAAQMD's Review of Data Center Diesel Engine Operations

Scoping comments on the CA3 data center project from the Bay Area Air Quality Management District (BAAQMD) provided a review of data centers that initiated the operation of diesel engines for "non-testing/non-maintenance" purposes to inform

1 Pacific Gas and Electric Company, 2023 Annual Electric Reliability Report, dated July 15, 2024. Accessed online at: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/infrastructure/electric-reliability-reports/pge-2023-annual-electric-reliability-report.pdf>

staff's consideration of scenarios of emergency backup power generation operations beyond routine testing and maintenance (BAAQMD 2021). BAAQMD's review covers a 13-month period (September 1, 2019, to September 30, 2020) that spans different types of emergency situations across California.

There were 66 data centers under the jurisdiction of BAAQMD. Staff at BAAQMD gathered information from 45 of those data center facilities. The attachment to BAAQMD's scoping comments on the CA3 data center project listed 20 facilities that reported some level of "non-testing/non-maintenance" diesel engine use in the 13-month period (CEC 2021).

The scope of BAAQMD's review can be summarized as follows:

- a. Period covered: 13 months (9,504 hours)
- b. Facilities (data centers) under BAAQMD jurisdiction: 66 data centers
- c. Facilities from which information was collected: 45 data centers
- d. Facilities responding with some "non-testing/non-maintenance" use: 20 data centers
- e. Permitted engines at the 20 facilities responding: 288 engines
- f. Installed generating capacity of engines at the 20 facilities responding: 686.5 MW
- g. Information was not provided for the 25 facilities that did not report any non-testing/non-maintenance use or the other 21 facilities under BAAQMD's jurisdiction that were not surveyed in this data gathering effort.

BAAQMD normally issues permits for standby diesel generator engines, and the permit requires each owner or operator to maintain records of the number of operating hours for each "emergency" and the nature of the emergency. The types of events within BAAQMD's review period include a Governor-proclaimed state of emergency, other outages, power quality events, and human errors. The data shows that 75 percent of all engine-hours occurred either during the August 2020 Governor-proclaimed state of emergency or the subsequent heat event in September 2020. Staff does not consider this a typical year, and the data is probably not representative or indicative of future years.

For the 20 data centers listed in BAAQMD's review, the total permitted and installed generating capacity of these facilities equals 686.5 MW, across 288 individual diesel engines. The total amount of "non-testing/non-maintenance" runtime of all these 288 engines amounted to approximately 1,877 engine-hours of operation.

Table B-1 summarizes the runtimes found by BAAQMD's review for each of the 20 data centers. BAAQMD's review identified one data center facility that ran diesel generators for approximately 400 hours for non-testing/non-maintenance purposes during this time period. **Table B-1** shows that this facility has over 40 individual

engines permitted at the site for an average runtime of about 10 hours per engine. The different data centers within BAAQMD's review showed that nine of the 20 facilities responding had fewer than 50 hours of operating one or more diesel engines for non-testing/non-maintenance purposes.

TABLE B-1 BAAQMD'S REVIEW OF NON-TESTING/ NON-MAINTENANCE OPERATION (ENGINE-HOURS)

Data Center	# of Permitted Engines	# of Engines with Non-Testing/ Non-Maintenance Operations	Sum of Non-Testing/ Non-Maintenance Operations (Engine-Hours)	Average Hours of Operations per Engine Used
1	10	10	83	8.3
2	5	5	77	15.3
3	6	6	108	18.0
4	44	44	22	0.5
5	3	2	11	5.5
6	6	6	219	36.5
7	24	24	202	8.4
8	26	24	10	0.4
9	5	5	26	5.2
10	41	40	401	10.0
11	14	11	75	6.8
12	11	11	275	25.0
13	5	5	85	17.0
14	22	8	28	3.4
15	8	7	98	14.0
16	17	4	10	2.4
17	2	2	4	2.0
18	8	6	18	3.0
19	6	6	24	4.0
20	25	17	103	6.0
Total	288	243	1,877	Max. 36.5

Sources: BAAQMD 2021, Energy Commission staff analysis of data from BAAQMD

From the runtimes of all the engines at all facilities in BAAQMD's review, **Table B-1** estimates that the average engine ran no more than 36.5 hours over the 13-month period. Staff also found that no single engine within BAAQMD's review ran for more than 50 hours overall for "non-testing/non-maintenance" purposes.

Staff used the data in BAAQMD's review (BAAQMD 2021) and a clarifying email of BAAQMD results (CEC 2021) to estimate the power production during "non-testing/non-maintenance" diesel engine use and found that approximately 1,575 MWh was generated during this 13-month (9,504 hour) period. The power generated by these engines presumably displaced grid service for the on-site data center facility electrical demand. Based on the installed generating capacity of 686.5 MW partially operating within the 13-month record, the engines in BAAQMD's review that did operate would have an extremely low capacity-factor of 0.024 percent [0.024 percent = 1,575 MWh / (686.5 MW * 9,504 hours)]. This capacity factor is only considering the facilities that

had engines that ran during this 13-month period. Twenty-five of the 45 facilities reporting had zero hours of engine runtime.

Consideration of Extreme Events. California experienced different types of emergency situations within the 13-month period (September 1, 2019, to September 30, 2020) of BAAQMD’s review. This period included the expansion of PG&E’s PSPS program, severe wildfires, several California Independent System Operator (CAISO) declared emergencies, and winter storms. From August 14, to 19, 2020, California experienced excessive heat. On August 16, 2020, Governor Newsom proclaimed a state of emergency² because of the extreme heat wave in California and surrounding western states. This was a one in 30-year weather event that resulted in the first system-wide power outages California had seen in 20 years. In addition to the extreme heat wave in mid-August, high temperatures and high electricity demand occurred over the 2020 Labor Day weekend, especially on Sunday, September 6, and Monday, September 7, 2020 (CAISO 2021). Thus, the data set provided is not necessarily representative of an average 13-month period from which one could extrapolate average backup facility use into the future.

Table B-2 summarizes how these extreme events influenced the runtimes found by BAAQMD’s review for each of the 20 data centers.

Table B-2 shows that most “non-testing/non-maintenance” diesel engine use identified by BAAQMD’s review (over 1,400 engine-hours out of 1,877 engine-hours) occurred either during the August 2020 Governor-proclaimed state of emergency or the subsequent heat event in September. Excluding these extreme events results in 473.7 engine-hours of “non-testing/non-maintenance” diesel engine use during other dates, or fewer than two hours per engine for all 288 engines in the review. Out of the 20 data centers that ran engines for “non-testing/non-maintenance” purposes, the 473.7 engine-hours of runtime outside of extreme events was spread across 10 data centers out of the 45 data centers covered by BAAQMD’s review.

Similarly, staff estimates that over 50 percent of the overall power produced by the engines in BAAQMD’s review (at least 843 MWh of 1,575 MWh) occurred during the Governor-proclaimed state of emergency, and another 25 percent of the power produced was attributable to unknown days in the period. Staff’s analysis of actual power produced during each day of the 13-month record appears in **Table B-3**.

2 <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.16.20-Extreme-Heat-Event-proclamation.pdf>

**TABLE B-2 EXTREME EVENTS: NON-TESTING/NON-MAINTENANCE OPERATION
(ENGINE-HOURS)**

Data Center	Operations During August 2020 State of Emergency (Engine-Hours)	Operations During September 2020 Heat Event (Engine-Hours)	Other Dates of Operations (Engine-Hours)	Sum of Non-Testing/ Non-Maintenance Operations (Engine-Hours)
1	82.7			83
2			76.6	77
3	107.8			108
4	21.6			22
5	11.0			11
6	218.8			219
7	88.2	81.2	32.5	202
8			10.3	10
9	26.0			26
10	259.7		141.1	401
11	75.0			75
12	275.3			275
13			85.0	85
14	19.9		7.6	28
15			98.0	98
16			9.6	10
17			4.0	4
18	9.0		9.0	18
19	24.0			24
20	88.4	14.3		103
Total	1,307.4	95.5	473.7	1,877

Sources: BAAQMD 2021, Energy Commission staff analysis of data from BAAQMD

Across all events, including the extreme event days within the period, **Table B-3** shows that the average engine loading in BAAQMD's review was below 40 percent. However, the data does not establish a typical type of operation that could be reasonably expected to occur during any emergency or any typical operational characteristics that could be used in representative air quality modeling. For example, some engines in the data set ran at no load or with very low loads; one engine ran at no load for 41.7 hours while the highest engine load in the data set was 70 percent load. The range of engine loads and the fact that most engines operated at low loads demonstrates the difficulty in predicting the level of facility electrical demands that would need to be served by the engines during an emergency. This also demonstrates the difficulty in making an informed prediction of the engines' emission rates, which vary depending on load, in the event of an emergency.

TABLE B-3 EXTREME EVENTS: NON-TESTING/NON-MAINTENANCE OPERATION (ENGINE LOADS)

Date of Event Start	Extreme Heat Wave Event?	Non-Testing/Non-Maintenance Operations - @ actual load (MWh - per day)	Average Engine Loading on Event Day
Unknown		418.0	45.3%
11/26/2019		1.1	13.8%
11/27/2019		5.5	17.7%
2/15/2020		0.7	7.0%
7/31/2020		2.9	17.3%
8/14/2020		39.0	48.0%
8/16/2020		25.6	38.4%
8/17/2020	Aug 2020 Emergency	843.1	34.5%
8/18/2020	Aug 2020 Emergency	112.0	31.2%
8/19/2020	Aug 2020 Emergency	14.4	40.0%
8/25/2020		5.4	30.0%
9/6/2020	Sept 2020 Event	90.0	48.6%
9/7/2020	Sept 2020 Event	16.8	39.2%
Total		1,574.7	Average 31.6%

Sources: BAAQMD 2021, Energy Commission staff analysis of data from BAAQMD

Frequency of Diesel Engine Emergency Use, Discussion. The BAAQMD scoping comment on the CA3 data center project illustrates that standby generator engines were used at data centers for “non-testing/non-maintenance” purposes that could occur more frequently than utility service power outages.

In BAAQMD’s review, including the extreme events, 1,877 engine-hours of diesel engine use occurred at 20 data centers for “non-testing/non-maintenance” purposes (less than half of the 45 facilities included in the review, and less than a third of such facilities under BAAQMD’s jurisdiction). These runtimes occurred due to power outages, in response to the heat storm, and also for other unspecified situations categorized by the engine operators as “emergencies.” BAAQMD’s review covered 288 individual diesel engines that operated over a 13-month record. Data was not provided concerning the number of engines at the 25 facilities that did not operate under these circumstances. Because the backup generator engines were collectively available for over 2.74 million engine-hours during the 13-month period (288 engines * 9,504 hours), and they were used for emergency operations for 1,877 engine-hours, at those facilities where operation occurred, the engines entered emergency operations during 0.07 percent of their available time (1,877 / 2.74 million). This confirms that emergency use of the engines would be very infrequent. It is important to note that this calculation only takes into consideration those engines that BAAQMD found to run during this time period; a more comprehensive review would also include the availability of the 25 facilities that had zero hours of engine run time and also

conceivably the 21 facilities that were not surveyed at all. If these facilities without engine runs were included, the estimated probability that any given engine would be likely to run would be lower.

Duration of Diesel Engine Emergency Use, Discussion. The BAAQMD scoping comment on the CA3 data center project shows standby generator engines were used for “non-testing/non-maintenance” purposes, mostly due to extreme events within the 13-month record. The average runtime for each event in BAAQMD’s review was approximately 5.0 hours. This shows that the duration of diesel engine use for “non-testing/non-maintenance” purposes, without excluding the extreme events, could involve longer runtimes than for typical utility service power outages. However, again this calculation does not factor in the larger proportion of facilities that did not run at all.

BAAQMD’s review of diesel engine use considers a wider variety of reasons for running the engines than solely an electric power service outage. The listed reasons include: state of emergency load shedding, human error event, utility-inflicted disturbance, lightning strikes to transmission line, utility outage, power outage, system-wide power quality event, equipment failure, power bump, power supplier request, power blips, UPS/board repair, utility sag event, mandatory load transfer, and substation transformer power equipment failure. Many of these explanations are simply subcategories under the general category of grid reliability analyzed for prior cases. Others like a human error event, equipment failure, and UPS/board repair appear to be exceedingly rare occurrences unlikely to significantly add to the calculation of when emergency operations might occur. Lastly, the category of emergency load shedding/power supplier request/mandatory load transfer all appear related to the heat storm and Governor-proclaimed state of emergency described above and, given the state’s efforts to address reliability in response to such events, are unlikely to re-occur with any frequency. The provision of these categories and sub-categories helps to explain why BAAQMD shows more instances of engines running than staff found in prior cases and longer durations of runtimes during emergency situations. Although emergency operations could be triggered for a range of situations, including extreme events like those of August and September 2020, this information confirms that regardless of the triggering event, emergency operations of standby generator engines would be expected to be infrequent and of short duration.

Summary of Staff’s Analysis of “Non-testing/Non-maintenance” Engine Use.

BAAQMD’s review of “non-testing/non-maintenance” engine operations expands our understanding of “when, why, and for how long” diesel engine use might occur. BAAQMD’s 13-month period of review included a Governor-proclaimed state of emergency, other outages, power quality events, and human errors. Accordingly, BAAQMD’s review confirms that engine use may occur for reasons other than grid outages, though the period is not representative of a typical year due to the rare heat storm events. Many engines were used for “non-testing/non-maintenance” purposes in the period reviewed by BAAQMD, but the overall number of hours of operation for

the less than half of the facilities in the review that did run was 0.07 percent of the available time. Engine loading levels recorded during these times of use were low (average below 40 percent), and the capacity factor of these engines was extremely low (0.024 percent). The BAAQMD review confirms that these types of events remain infrequent, irregular, and unlikely, and the resulting emissions are not easily predictable or quantifiable. The BAAQMD review does not show that these facilities operate significantly more than staff previously analyzed in the grid reliability context in prior cases.

CPUC Decisions, Directing PG&E, Southern California Edison, and San Diego Gas & Electric To Take Actions To Prepare For Potential Extreme Weather In The Summers Of 2021 And 2022, and Beyond

On March 25, 2021, CPUC adopted decision D.21-03-056, which directed the utilities to take specific actions to decrease peak and net peak demand and increase peak and net peak supply to avert the potential need for rotating outages that are similar to the events that occurred in summer 2020 in the summers of 2021 and 2022. On December 2, 2021, CPUC adopted decision D.21-12-015, which is Phase 2 of the proceeding, and focuses on increasing electric supply and reducing demand for 2022 and 2023 (CPUC 2021b). In December 2023, the CPUC issued a decision (D.23-12-005) updating policies for Demand Response (DR) programs (which include the ELRP) for the years 2024 through 2027 (CPUC 2023).

Addressed in the decisions are the following scoped issues:

1. Flex Alert program authorization and design
2. Modifications to and expansion of Critical Peak Pricing (CPP) Program
3. The development of an Emergency Load Reduction Program (ELRP)
4. Modifications to existing demand response (DR) programs
5. Expedited Integrated Resource Plan (IRP) procurement
6. Modifications to the planning reserve margin (PRM)
7. Parameters for supply side capacity procurement
8. Expanded electric vehicle participation

This menu of options attempts to ensure grid reliability. One of the options, ELRP, allows PG&E, Southern California Edison, San Diego Gas & Electric, and CAISO to access additional load reduction during times of high grid stress and emergencies involving inadequate market resources, with the goal of avoiding rotating outages while minimizing costs to ratepayers.

The CPUC decisions would allow data centers to choose to participate in a program whereby they could be asked to shed load if an extreme heat event similar to the August 2020 event occurs in the summer of 2022 or 2023. The initial duration of the

ELRP pilot program will be five years, 2021-2025, with years 2023-2025 subject to review and revision in the Demand Response Applications proceeding. However, the CPUC decision lays out many options for emergency load reduction to ensure grid reliability that could be utilized before resorting to backup diesel generators. The decision explains that the ELRP design aspects that are subject to review and revision as part of the pilot program include minimizing the use of diesel backup generators where there are safe, cost-effective, and feasible alternatives (CPUC 2021a, Section 5.2, page 19).

However, it is not expected that the proposed project would participate in the ELRP or any other DR programs as it would be located in an SB 535-designated Disadvantaged Community and would be prohibited from participating in the ELRP, even if a Governor's Executive Order allows the use of prohibited resources during an ELRP event (CPUC 2021b, p. 42).

Electrical Reliability Supporting Information

The California Energy Commission staff provided a series of questions to PG&E designed to understand when, why, and for how long backup generators would need to operate for any purpose, including PSPS, other than readiness testing or maintenance at the proposed data center in the PG&E service area.

This supporting information includes the following:

STACK SVY03A Campus Supplemental Responses to CEC Staff Data Requests Set 1 - SJ04 – Part I **Item 19-20 and Item 22-23 on February 12, 2024** (DayZenLLC 2024a)

19. Please provide a complete one-line diagram for the new PG&E switchyard. Show all equipment ratings, including bay arrangement of the breakers, disconnect switches, buses, and related equipment that would be required for interconnection of the on-site project substation. Please label the name of the transmission lines which connect the switchyard to the PG&E system.

Response to Data Request 19

The one-line diagram was provided by PG&E and is included in Attachment PD DR-19.

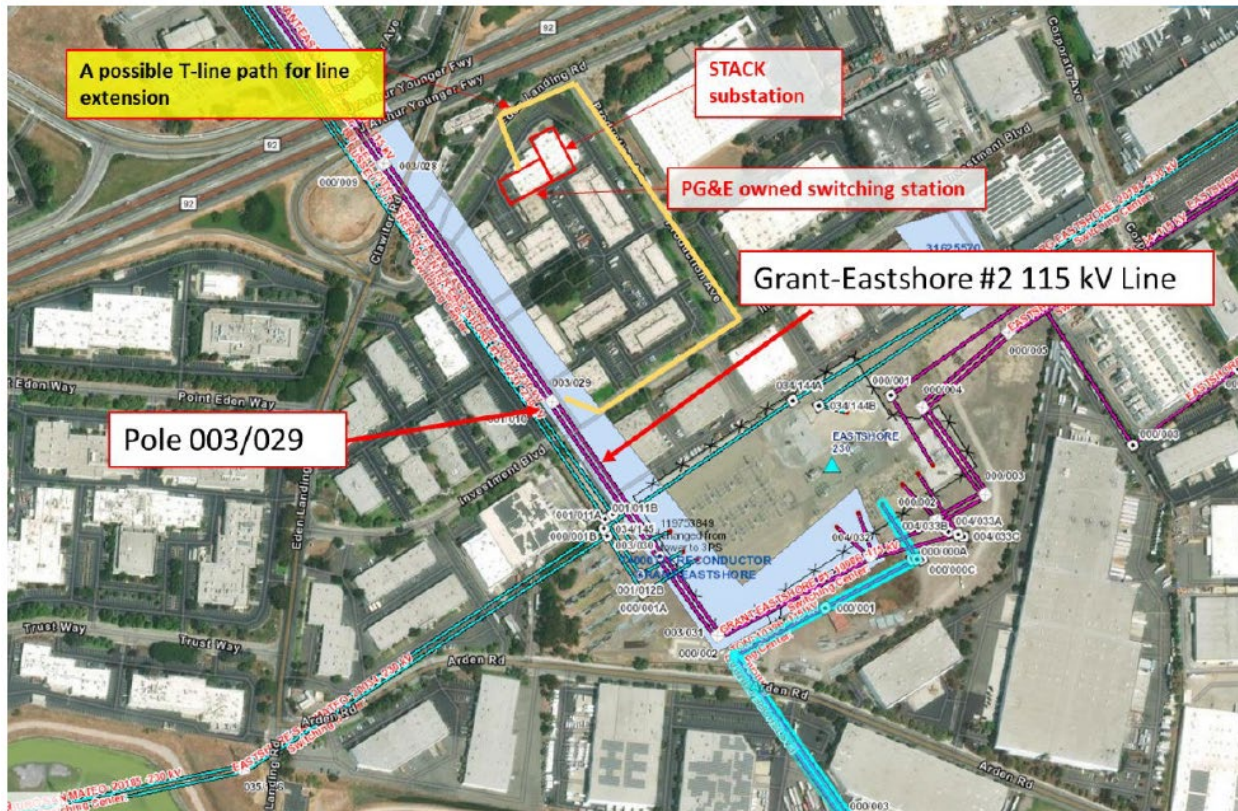
20. Please provide the conductor name, type, current carrying capacity, and the overhead conductor size for the 115 kV transmission lines which connect the existing PG&E Eastshore-Grant 115 kV line to the new switchyard. Provide a map showing the route and pole locations of the extensions.

Response to Data Request 20

Transmission line will use 2-795ACSS conductor. Substation will use 2-2300AAC. The route and pole locations will be determined during preliminary design.

However, for purposes of conducting a CEQA analysis, the Staff can use the following figure to further augment the written description contained in the SPPE.

To serve the SVY03A Campus, PG&E will be constructing a “looped” transmission interconnection involving two offsite transmission line extensions. This would involve a line on the south side of the project that comprises a two circuits of 115 kV OH (Overhead) Transmission line (T-Line) from an existing PG&E Eastshore to Grant 115 kV Line which is located on the south side of the project.



22. Please provide information that reviews the frequency and duration of historic outages of the Eastshore-Grant 115 kV line and related facilities that would likely trigger the loss of electric service to the proposed onsite substation and could lead to the emergency operations of the diesel-powered generators. This response should identify the reliability of service historically provided by PG&E to similar customers in this part of its service territory.

Response to Data Request 22

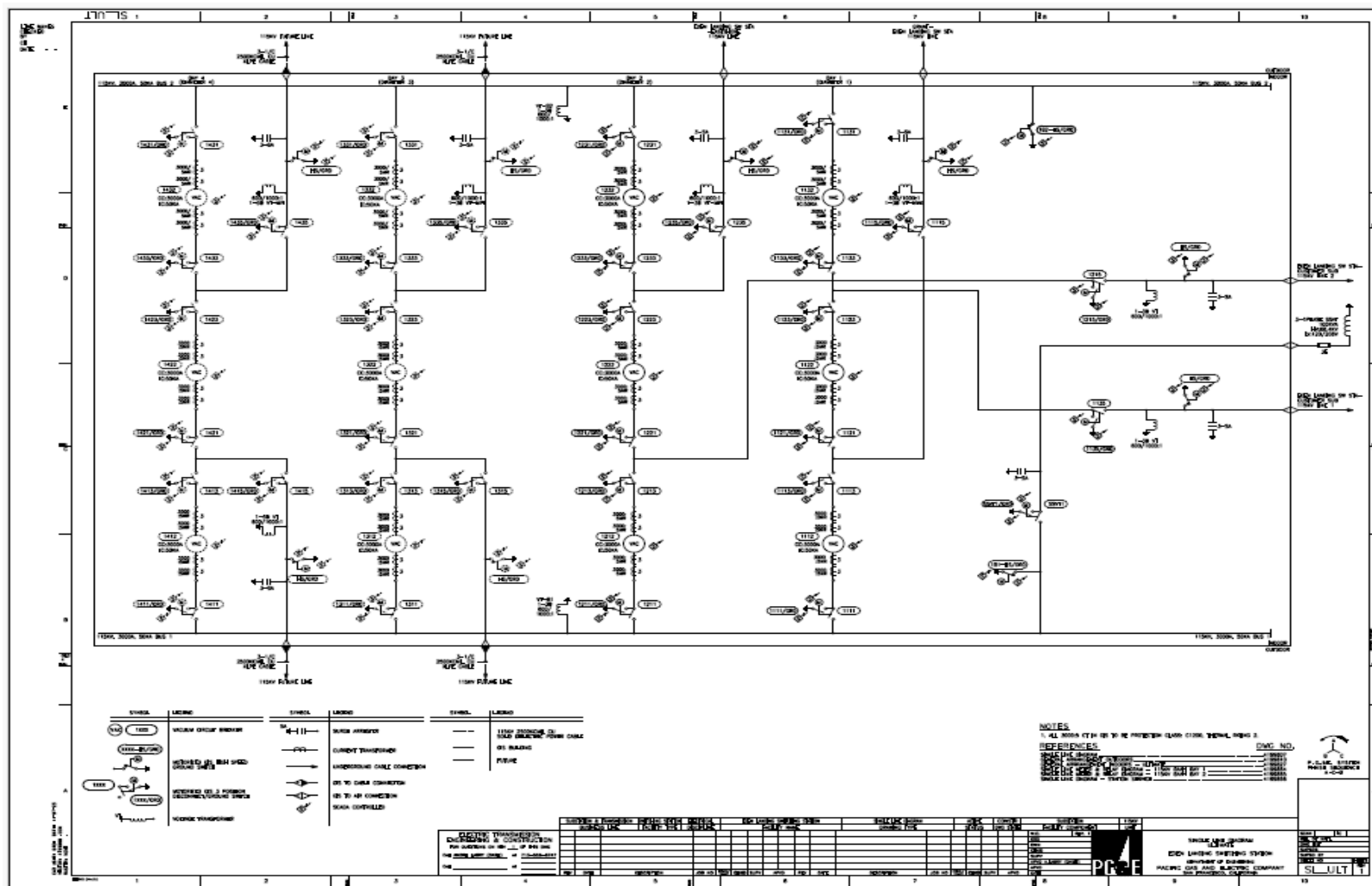
PG&E provided the information responsive to this request in Attachment PD DR-22.

23. Please explain whether adding the SVY03A Campus would cause an overload to the PG&E transmission system which would require upgrades to the existing system.

Response to Data Request 23

PG&E has conducted a preliminary study to identify potential impacts from STACK's interconnection request for service. PG&E has identified potential thermal impacts to PG&E Transmission system from STACK's interconnection and it is possible that all can potentially require upgrades and are listed in Table 3.1 included in Attachment PD DR-23. Please note some of the upgrades are needed 5 years from today or beyond, for which PG&E may not have the exact mitigation developed yet and therefore is only requiring monitoring. For the P5 mitigations that are required by 2027, Eastshore 230 kV non-redundant relay mitigation is identified in 2023 Expansion Plan and therefore would be completed by PG&E as part of its approved expansion activities.

ATTACHMENT PD DR-19
PG&E Switching Station One-Line Diagram



ATTACHMENT PD DR-22
PG&E Electrical Outage Table

kV	FACILITY NAME	YEAR	Date Out	Time Out	ET Wire Down	Auto Reclose Disabled	Dur (hr:min)	Dur (mins)	Date In	Time In	Cause Category	Cause Detail	Secondary Cause	Comments	REGION	Cust Affected	Fault Type
115	GRANT-EASTSHORE #1	2019	07/09/19	7:41	No	No	3:52	232	07/09/19	11:33	External Contact	Foreign object	NONE	Relayed - 07/09/19, 0741 Grant-East Shore #1-115kV relayed, tested NG. no customers interrupted; weather clear; A-G fault 1.45 mi from Eastshore. near 002/022, +/-1 mi; 1128 Line manually tested OK after no trouble found. 1133 Line returned to service; apparent 3rd party contact, burn mark seen on its crane; CAP ER=117573629	BAY AREA	0	A-G
115	GRANT-EASTSHORE #1	2020	10/04/20	15:09	No	No	0:01	1	10/04/20	15:10	Animal	Bird	CB	Relayed - 10/04/20, 1509 Grant #2-115/12kV transformer relayed, tested OK due to avian contact on low-side; on the trouble Grant 115kV bus sections "D", "E", "F", #1-115/12kV transformer & Oakland J-Grant 115kV de-energized; Grant-East Shore #1 & #2-115kV lines open-ended at Grant; MOM Grant (CEMO=22,943); weather clear; avian contact led to catastrophic failure of CB-1108; CAP ER=119852449	BAY AREA	7,498	NA
115	GRANT-EASTSHORE #2	2020	10/04/20	15:09	No	No	0:01	1	10/04/20	15:10	Animal	Bird	CB	Relayed - 10/04/20, 1509 Grant #2-115/12kV transformer relayed, tested OK due to avian contact on low-side; on the trouble Grant 115kV bus sections "D", "E", "F", #1-115/12kV transformer & Oakland J-Grant 115kV de-energized; Grant-East Shore #1 & #2-115kV lines open-ended at Grant; MOM Grant (CEMO=22,943); weather clear; avian contact led to catastrophic failure of CB-1108; CAP ER=119852449	BAY AREA	7,497	NA
115	GRANT-EASTSHORE #2	2022	09/09/22	7:06	No	No	9:27	567	09/09/22	16:33	Other	Other-safety clearance	AUX	Forced - 09/09/22, 0706 to 1633 Grant-Eastshore #2-115kV forced to replace Grant CB-122 NG A phase CCVT; no customers interrupted	BAY AREA	0	NA

ATTACHMENT PD DR-23

Potential Impacts to PG&E System

Table 3-1: Summary of Required Capacity Upgrades

Monitored Facility	Category	Comments	T1/T2	T3	T4
Grant - East Shore 115kV Line #2 (Stack SS - East Shore 115kV Line)	P2	2032 pst-project overload, keep monitoring, mitigation TBD	no	yes	no
East Shore 230/115 kV Transformers 1 and 2	P1, P6	can be mitigated by system adjustment for short-term, long-term mitigation TBD	yes	yes	no
Moraga - Oakland J 115 kV Line	P1, P2, P3, P6, P7	2032 pst-project overload, keep monitoring, long term mitigation TBD OJ RAS can mitigate until long term mitigation can be put in place	yes	yes	yes
Moraga - San Leandro #1, #2 and E3 115 kV Lines	P3	San Leandro RAS, system adjustment for short-term, long-term mitigation TBD	yes	yes	yes
Oakland D-Oakland L 115 kV Cable	P2	pre-project issue in 2032, minor contribution from project, keep monitoring	yes	yes	yes
Pittsburg-East Shore 230 kV Line	P3	keep monitoring, 2032 OJ RAS can mitigate until long term mitigation can be put in place	yes	yes	yes
Pittsburg-San Mateo 230 kV Line (section 1)	P7	pre-project issue in 2032, minor contribution from project, keep monitoring	yes	yes	yes
San Leandro-Oakland J #1 115 kV Line	P2, P3, P6, P7	2032 pst-project overload, keep monitoring, long-term mitigation TBD OJ RAS can mitigate until long term mitigation can be put in place	yes	yes	yes
Sobrante-Moraga 115 kV Line	P2	pre-project issue in 2032, minor contribution from project, keep monitoring	yes	yes	yes
Vaca-Vacaville-Jameson-North Tower 115 kV Line (Hale Jct 1-Vacaville Jct 1)	P3	keep monitoring, 2032	no	yes	yes
P5-SA:A16:1: EAST SHORE 230 KV BAAH (FAILURE OF NON-REDUNDENT RELAY)	P5	require mitigation in 2027, post-project issues thermal overloads and low voltage issues	yes	yes	yes only in 2032
P5-SA:A8:4: MORAGA 230KV BUS #1 &2(Failure of Non-Redundent Relay)	P5	pre-project issue in in 2032, no mitigation required from the project	yes	yes	yes
P5-SC:A10:2: RAVENSWOOD 230-115KV BATT(Failure of Non-Redundent Batt)	P5	requires mitigation in 2027, post project issue for low voltage	no	yes	no
P5-SC:A16:11: EASTSHORE 115KV BATT(Failure of Non-Redundent Batt)	P5	require mitigation in 2027, post-project issues thermal overloads and low voltages	no	yes	no
P5-SC:A16:5: EASTSHORE 230KV BATT(Failure of Non-Redundent Batt)	P5	require mitigation in 2027, post-project issues thermal overloads and low voltages	yes	yes	yes only in 2032
P5-SC:A16:7: NEWARK 230KV BATT(Failure of Non-Redundent Batt)	P5	require mitigation in 2032, post-project issues thermal overloads	yes	yes	yes
P5-SC:A16:9: SAN LEANDRO (OAK U) 115KV BATT(Failure of Non-Redundent Batt)	P5	pre-project issue in in 2032, no mitigation required from the project	yes	yes	yes
P5-SC:A8:3: PITTSBURG PP 230-115KV BATT(Failure of Non-Redundent Batt)	P5	require mitigation in 2032, post-project issues thermal overloads	yes	yes	yes
P5-SC:A8:8: MORAGA 230-115KV BATT(Failure of Non-Redundent Batt)	P5	pre-project issue in in 2027/2032, no mitigation required from the project	yes	yes	yes

References

BAAQMD 2021 – Bay Area Air Quality Management District Comments (BAAQMD). (TN 239805). Letter for CA3 Data Center NOP, dated September 21, 2021. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-SPPE-01>

CAISO 2021 – California Independent System Operator (CAISO). Final Root Cause Analysis Mid-August 2020 Extreme Heat Wave, dated January 13, 2021. Accessed December 2022. Accessed online at: <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>

CEC 2021 – California Energy Commission (CEC). Record of Conversation with J. Zielkiewicz, BAAQMD Staff Regarding Emergency Operations: Great Oaks South Backup Generating Facility (TN 237631), May 2021. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-SPPE-01>

CPUC 2016 – California Public Utilities Commission (CPUC). Decision Adopting Guidance For Future Demand Response Portfolios And Modifying Decision 14-12-024. Decision 16-09-056 September 29, 2016. Accessed online at:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/m167/K725/167725665.Pdf>

CPUC 2021a – California Public Utilities Commission (CPUC). Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company To Take Actions To Prepare For Potential Extreme Weather In The Summers Of 2021 and 2022. Decision 21-03-056 March 25, 2021. Accessed online at:

<https://docs.cpuc.ca.gov/publisheddocs/published/g000/m373/k745/373745051.pdf>

CPUC 2021b – California Public Utilities Commission (CPUC). Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company To Take Actions To Prepare For Potential Extreme Weather In The Summers Of 2022 and 2023. Decision 21-12-015, December 2, 2021. Accessed online at:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M428/K821/428821475.PDF>

CPUC 2023 – California Public Utilities Commission (CPUC). Decision Directing Certain Investor-Owned Utilities’ Demand Response Programs, Pilots, And Budgets For The Years 2024-2027. Decision 23-12-005 December 14, 2023. Accessed online at:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M521/K486/521486520.PDF>

DayZenLLC 2024a – DayZenLLC (TN 254405). STACK SVY03A Supplemental Data Responses Set 1, dated February 12, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZenLLC 2024b – DayZenLLC (TN 254420). STACK SVY03A–STACK Supplemental Data Responses Set 1 Attachment PD DR-19, dated February 12, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

DayZen 2024I – DayZenLLC (TN 258535). STACK SVY03A Revised Project Description - Part I of II, dated August 16, 2024. Accessed online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SPPE-01>

Appendix C

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

STACK SVY03A Data Center Campus

23-SPPE-01

March 2025

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

While the CEC is the lead agency in assessing the exemption application, the CEC is not the jurisdiction that will be approving the project for construction and operations. Such authority will be with the City of Hayward. Therefore, the MMRP will be implemented and enforced by the City upon its approval of the project.

The Draft Initial Study/Mitigated Negative Declaration prepared for the STACK SVY03A Data Center Campus concluded that the implementation of the project would not result in significant effects on the environment with the incorporation of mitigation measures. This MMRP addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the Initial Study/Mitigated Negative Declaration concluded that the impacts from implementation of the project would be less than significant.

I, _____, the applicant, on the behalf of _____, hereby agree to fully implement the mitigation measures described below which have been developed in conjunction with the preparation of an Initial Study/Mitigated Negative Declaration for my proposed project. I understand that these mitigation measures or substantially similar measures will be adopted as conditions of approval with my development permit request to avoid or significantly reduce potential environmental impacts to a less than significant level.

Project Applicant's Signature _____

Date_____

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
Impact 5.3-b Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					
<p>AQ-1: To incorporate the Bay Area Air Quality Management District (BAAQMD) recommendations for Best Management Practices (BMPs) to control fugitive dust, the project owner shall implement a construction emissions control plan that has been reviewed and approved by the Director or Director's designee of the City of Hayward Development Services Department prior to the issuance of any grading or building permits, whichever occurs earliest. The project owner shall implement the following measures during construction:</p> <ul style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 	Implement the BAAQMD's recommended BMPs to control fugitive dust and additional measures to control exhaust emissions.	During construction phase.	City of Hayward Director of Development Services Department or Director's designee.	Receive, review, and approve the construction emissions control plan to be implemented during construction.	Prior to the issuance of any demolition, grading, and/or building permits (whichever occurs earliest).

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
<ul style="list-style-type: none"> All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. All vehicle speeds on onsite unpaved roads shall be limited to 5 mph. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. All trucks and equipment, including their tires, shall be washed off prior to leaving the site. Unpaved roads providing access to sites located 100 feet or further 					

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AIR QUALITY					
<p>from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.</p> <ul style="list-style-type: none"> Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points. All off-road equipment greater than 25 horsepower (hp) shall have engines that meet or exceed Tier 4 final off-road emission standards. Use of zero-emission and hybrid-powered equipment is encouraged. Properly tune and maintain construction equipment in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 					

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AIR QUALITY					
<ul style="list-style-type: none"> • Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Minimize the amount of excavated material or waste materials stored at the site. • Post a publicly visible sign with the telephone number and name of the person to contact regarding dust complaints and the BAAQMD telephone number. The contact person shall implement corrective measures, as needed, within 48 hours, and the BAAQMD shall be informed of any legitimate complaints received to verify compliance with applicable regulations. 					

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BIOLOGICAL RESOURCES					
Impact 5.4-a Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					
BIO-1: Worker Environmental Awareness Program A qualified biologist shall be retained by the project owner/developer to conduct a Worker Environmental Awareness Program (WEAP) training focused on nesting bird protection for all construction personnel prior to the commencement of any ground-disturbing activities during the nesting season. The training shall include a description of nesting bird species that may be encountered, regulatory protections under the Migratory Bird Treaty Act and California Fish and Game Code and other state and federal laws protecting birds, survey and buffer requirements during the nesting season, and proper protocols for reporting and avoiding impacts to active nests.	Retain a qualified biologist to conduct WEAP training.	Prior to ground-disturbing activities during nesting season.	City of Hayward Director of Development Services Department or Director's designee.	Contract with biologist, training schedule.	Before start of construction.
	Conduct WEAP training for all construction personnel.	Prior to ground-disturbing activities during nesting season.	City of Hayward Director of Development Services Department or Director's designee.	Sign-in sheet, training materials.	Before start of construction.
	Ensure all workers complete training before site activities begin.	Before site disturbance.	City of Hayward Director of Development Services Department or Director's designee.	Worker training certificates, signed acknowledgment forms.	Before start of construction.
	Maintain a record of training	Ongoing.	City of Hayward Director of	Training logs, attendance sheets.	As requested by Director of

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BIOLOGICAL RESOURCES					
	materials and attendance.		Development Services Department or Director's designee.		Development Services.
BIO-2: Nesting Bird Avoidance and Minimization Measures Project construction shall be conducted outside of the nesting bird season to the extent feasible (September 1 to January 31). If construction activities commence outside this period, from February 1 through August 31, or if tree removal and pruning occurs outside this period, then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities or initiation of tree removal and pruning. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees,	If feasible, schedule construction outside of the nesting bird season (September 1 – January 31).	Non-nesting bird season (i.e., September through January).	City of Hayward Director of Development Services Department or Director's designee.	Confirm that construction activities are scheduled outside of the nesting season. If not outside nesting season, surveys are required.	Schedule construction activities for September through January.
	If construction occurs between February 1 – August 31, conduct preconstruction surveys for nesting birds within 7 days before work begins.	Within 7 days before the initiation of demolition, construction, or tree removal.	City of Hayward Director of Development Services Department or Director's designee.	Submit results of preconstruction surveys by a qualified biologist.	Submit results of preconstruction survey prior to tree removal and the issuance of a grading or demolition permit.
	Inspect all trees and nesting habitats within	During pre-construction survey.	City of Hayward Director of Development	Submit results of preconstruction	Prior to construction or tree removal.

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BIOLOGICAL RESOURCES					
shrubs, ruderal grasslands, buildings) in and up 500 feet from the impact areas for nests. If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, the ornithologist shall establish a species-specific work exclusion zone around each nest that shall be followed by the contractor. If an active nest is found within a distance that could result in disturbance, the ornithologist shall establish a construction-free buffer zone—typically 300 feet for raptors and 100 feet for other bird species—to prevent nest disturbance. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors; an exclusion zone radius (typically 300 feet for raptors and 100	the project area and up to 500 feet from impact zones for active nests.		Services Department or Director's designee.	surveys by a qualified biologist.	
	Establish species-specific exclusion zones (typically 300 feet for raptors, 100 feet for other species) if active nests are found.	Bi-weekly until nestlings have fledged or nests are no longer active.	City of Hayward Director of Development Services or Director's designee.	Submit results of preconstruction surveys by a qualified biologist.	Monitoring shall begin immediately upon establishing an active nest.
	Maintain exclusion zones until young have fledged or the nest is inactive.	During pre-construction surveys or during project construction.	City of Hayward Director of Development Services or Director's designee.	Submit results of preconstruction surveys by a qualified biologist.	Submit results of preconstruction survey prior to tree removal and the issuance of a grading or demolition permit and/or upon completion of nesting season.
	Reduce exclusion zone only if monitoring supports no impact to nests.	During pre-construction surveys or during project construction.	City of Hayward Director of Planning Division or Director's designee.	Submit results of preconstruction surveys by a qualified biologist.	Submit results of preconstruction survey prior to tree removal and the issuance of a

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BIOLOGICAL RESOURCES					
<p>feet for other species). The exclusion zone size may be reduced from established levels if supported with nest monitoring by a qualified ornithologist indicating that work activities outside the reduced radius would not impact the nest.</p> <p>The project buffer shall be monitored periodically by the project ornithologist to verify compliance. After nesting is complete and all young have fledged, as determined by the ornithologist, the buffer would no longer be required, and tree removal may occur. If an active bird nest is discovered during demolition or construction, then a buffer zone shall be established under the guidelines specified above.</p> <p>A report detailing the survey findings and any required buffer zones shall be submitted to the Director of Development Services prior to tree removal and the issuance of a grading or demolition permit. The report shall contain maps showing the location of all nests, species nesting, status of the nest (e.g., incubation of eggs, feeding</p>					grading or demolition permit and/or upon completion of nesting season.
	Monitor project buffer zones periodically to ensure compliance.	During pre-construction surveys or during project construction.	City of Hayward Director of Planning Division or Director's designee.	Submit results of preconstruction surveys by a qualified biologist.	Submit results of preconstruction survey prior to tree removal and the issuance of a grading or demolition permit and/or upon completion of nesting season.
	Submit a report to the Director of Development Services detailing survey findings, buffer zones, and nest status.	Within 10 days of completing a pre-construction nest survey.	City of Hayward Director of Development Services or Director's designee.	Survey report with maps and nest details.	Submit results of preconstruction survey prior to tree removal and the issuance of a grading or demolition permit.

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BIOLOGICAL RESOURCES					
of young, near fledging), and the buffer size around each nest (including reasoning behind any alterations to the initial buffer size). The report shall be provided within 10 days of completing a pre-construction nest survey.					

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
Impact 5.5-a Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations, title 14, §15064.5?					
CUL-1: Prior to the commencement of construction, the applicant will secure the services of qualified archaeological specialists and Native American monitors. These specialists and monitors will prepare a Worker Environmental Awareness Program (WEAP) to instruct construction workers of the obligation to protect and preserve valuable archaeological and Native American resources. This program will be provided to all construction workers via a recorded presentation and will include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the specialists.	Submit the qualifications of archaeological specialists and Native American monitors to the Director or Director's designee of the City of Hayward Planning Division for review and approval.	Prior to issuance of any tree removal, grading, demolition, or building permits, whichever occurs first.	City of Hayward Director of Planning Division or Director's designee.	Review and approve the qualifications of archaeological specialists and Native American monitors.	Prior to issuance of any tree removal, grading, demolition, or building permits, whichever occurs first.
	The qualified archaeological specialists and Native American monitors shall prepare a WEAP and submit an electronic copy to the City of Hayward Director of Planning Division or Director's designee for review and approval.	Prior to issuance of any tree removal, grading, demolition, or building permits, whichever occurs first.	City of Hayward Director of Planning Division or Director's designee.	Review and approve the WEAP.	Prior to issuance of any tree removal, grading, demolition, or building permits, whichever occurs first.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
<p>The applicant will secure the services of Native American and archaeological monitors to observe excavations of native soil that underlie disturbed and fill dirt at the project site. Preference in selecting Native American monitors shall be given to members of the Confederated Villages of Lisjan Nation with:</p> <ul style="list-style-type: none"> • Traditional ties to the area being monitored. • Knowledge of local Native American village sites. • Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq. • Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq. • Ability to work with law enforcement officials and the Native American Heritage 					

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
<p>Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.</p> <ul style="list-style-type: none"> • Ability to travel to project sites within traditional tribal territory. • Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5. • Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions. • Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory. • Knowledge and understanding of archaeological practices, including the phases of archaeological investigation. 					

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
If members of the Confederated Villages of Lisjan Nation are unavailable for monitoring, the applicant may retain one or more monitors from another affiliated Ohlone tribe, if the monitor(s) meet the qualifications specified above.					
CUL-2: The project will be required to complete subsurface testing to determine the extent of possible resources onsite. Subsurface testing will include borehole testing or a combination of borehole testing and shovel test pits, and testing shall focus on the locations of the structural support piles or piers. Subsurface testing shall be completed by a qualified archaeologist and Native American monitors. Based on the findings of the subsurface testing, an archaeological resources treatment plan shall be prepared by a qualified archaeologist in consultation with Native American monitors.	The archaeological resources treatment plan shall be submitted to Director or Director's designee of the of the City of Hayward Planning Division for approval prior to the issuance of grading permits, if warranted.	After the existing buildings are demolished but before the issuance of grading permits.	City of Hayward Director of Planning Division or Director's designee.	Review and approve the archaeological resources treatment plan.	After the existing buildings are demolished but before the issuance of grading permits.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
CUL-3: If archaeological resources are encountered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the Director or Director's designee of the City of Hayward Planning Division shall be notified, and a qualified archaeologist will examine the find. The archaeological and Native American monitors will evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find	All activity within a 100-foot radius of the find shall be stopped, the Director or Director's designee of the City of Hayward Planning Division shall be notified, and a qualified archaeologist will examine the find.	During construction, upon inadvertent discovery of any archaeological resource.	City of Hayward Director of Planning Division or Director's designee.	Review and approve the recommendation(s) of the qualified archaeologist.	During the construction phase.
		During the construction phase.	City of Hayward Director of Planning Division or Director's designee.	Authorize construction to resume in the vicinity of the find if the find does not meet the definition of a historical, unique archaeological, or tribal cultural resources.	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
<p>does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeological and Native American monitors. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the Director or Director's designee of the City of Hayward Planning Division, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center.</p> <p>The project applicant will ensure that construction personnel do not collect or move any cultural material and will ensure that any fill soils that may be used for construction purposes do not contain any archaeological materials.</p>	<p>If the archaeological specialist and Native American monitors conclude the find meets the definition of a historical, unique archaeological, or tribal cultural resource and it cannot be avoided, they will prepare a treatment/mitigation plan for the resource.</p>	<p>During the construction phase.</p>	<p>City of Hayward Director of Planning Division or Director's designee.</p>	<p>If the find meets the definition of a historical, unique archaeological, or tribal cultural resource and cannot be avoided, review and authorize implementation of a treatment/mitigation plan and authorize construction to resume in the vicinity of the find.</p>	<p>During the construction phase.</p>
	<p>The archaeological specialist and Native American monitors implement mitigation/treatment measures.</p>	<p>During the construction phase.</p>	<p>City of Hayward Director of Planning Division or Director's designee.</p>	<p>The archaeological specialist and Native American monitors submit a report of findings to the Director or Director's designee, Native American Heritage Commission (for tribal cultural resources), and the</p>	<p>During the construction phase.</p>

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
				Northwest Information Center.	
	Keep construction and personnel at least 100 feet away from discovery site and leave any soil with archaeological materials in place.	During construction phase.	Project applicant and monitors.	Document in construction monitoring reports.	During construction phase.
CUL-4: If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Alameda County Coroner shall be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make	Immediately stop all construction within 100 feet of the discovery of human remains. Notify the Alameda County Coroner and Director or Director's designee of the of the City of Hayward Planning Division.	During the construction phase.	City of Hayward Director of Planning Division or Director's designee.	Authorize implementation of the treatment plan based on the recommendations of the MLD, if the remains are determined to be of Native American origin. Authorize construction to resume in the vicinity of the find.	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the Director or Director's designee of the City of Hayward Planning Division, the Northwest Information Center, and the MLD.					
Impact 5.5-b Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to California Code of Regulations, title 14, §15064.5?					
CUL-1 through CUL-4 (See impact 5.5-a for mitigation)					
Impact 5.5-c Would the project disturb any human remains, including those interred outside of formal cemeteries?					
CUL-1 through CUL-4 (See impact 5.5-a for mitigation)					
Impact 5.5-e Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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					

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?					
CUL-1 through CUL-4 (See impact 5.5-a for mitigation)					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
Impact 5.7-f Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					
<p>GEO-1: Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers are halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.</p> <p>Prior to the start of construction, the applicant shall secure the services of a qualified paleontologist specialist, as defined by the Society of Vertebrate Paleontology. The specialist shall</p>	<p>Secure services of an on-call qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology have been secured.</p> <p>If suspected fossils are encountered during construction, the construction workers shall halt construction within 50 feet of any potential fossil find and notify the qualified professional paleontologist,</p>	<p>Prior to the start of construction, the applicant shall secure the services of a qualified paleontologist specialist.</p> <p>As soon as suspected fossils are encountered and determined to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan.</p>	City of Hayward Director of Planning Division or Director's designee.	Review and approve the paleontological resource monitoring report and confirm disposition of significant fossil finds.	Prior to completion of construction.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
<p>prepare a Worker Environmental Awareness Program to instruct site workers of the obligation to protect and preserve valuable paleontological resources for review by the city's Planning Manager. This program shall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential paleontological resources encountered; and measures to notify their supervisor, the applicant, and the qualified paleontologist specialist.</p> <p>If a fossil is encountered and determined to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in the immediate area shall be halted or diverted to</p>	<p>who will evaluate its significance. The qualified paleontological specialist shall develop and implement an excavation and salvage plan. Afterward, the paleontologist shall prepare a paleontological resource monitoring report.</p>	<p>After salvage is complete, the paleontologist shall prepare a paleontological resource monitoring report.</p>			
	<p>The qualified paleontological specialist will prepare a Worker Environmental Awareness Program.</p>	<p>Prior to the commencement of construction.</p>	<p>City of Hayward Director of Planning Division or Director's designee.</p>	<p>Review and approve the Worker Environmental Awareness Program.</p>	<p>Prior to the commencement of construction.</p>

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GEOLOGY AND SOILS (PALEONTOLOGY)					
<p>allow recovery of fossil remains in a timely manner. Fossil remains collected shall be cleaned, repaired, sorted, and cataloged, along with copies of all pertinent field notes, photos, and maps.</p> <p>The paleontologist shall prepare a paleontological resource monitoring report that outlines the results of the monitoring program and any encountered fossils. The report shall be submitted to the city's Planning Division Manager or their or designee for review and approval. The report and any fossil remains collected shall be submitted to a scientific institution with paleontological collections.</p>					

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GREENHOUSE GAS EMISSIONS					
Impact 5.8-a Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Impact 5.8-b Would the project conflict with an applicable plan, policy or regulation adopted for the purpose or reducing the emissions of greenhouse gasses?					
GHG-1: The project owner shall participate in PG&E's Regional Renewable Choice Program or Ava Community Energy's Renewable 100 program (100 percent carbon-free electricity) or other clean energy program that accomplishes the same goal of 100 percent carbon-free electricity. During Operation, the project owner shall provide documentation to the director, or director's designee, of the City of Hayward Development Services Department of initial enrollment and shall submit annual reporting to the director, or director's designee, of the City of Hayward Development Services Department documenting either continued participation in PG&E's Regional Renewable Choice Program or Ava Community Energy's Renewable 100 program, or or documentation that alternative measures continue to	Provide documentation to the City of Hayward Director of Development Services Department or Director's designee of enrollment and annual reporting of continued participation in PG&E's Regional Renewable Choice Program, or Ava Community Energy's Renewable 100 program, or documentation showing that alternative measures	During operation.	City of Hayward Director of Development Services Department or Director's designee.	Review documentation and verify that the project is enrolled and continues to participate in PG&E's Regional Renewable Choice Program or Ava Community Energy's Renewable 100 program to use 100 percent carbon free electricity, or alternative measure continue to provide 100 percent carbon-free electricity.	Upon commencing project operation and annually for the life of the project.

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GREENHOUSE GAS EMISSIONS					
provide 100 percent carbon-free electricity as verified by an independent third-party auditor specializing in greenhouse gas emissions.	continue to provide 100 percent carbon-free electricity, as verified by an independent third-party auditor specializing in greenhouse gas emissions.				
GHG-2: The project owner shall use renewable diesel for 100 percent of total energy use by the gensets to the extent feasible, and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The project owner shall provide documentation of renewable diesel supply challenges or disruptions to the director, or director's designee, of the City of Hayward Development Services Department within 10 calendar days of occurrence and demonstrate a good faith effort to comply with the requirement and that compliance is not	Provide documentation to the City of Hayward Director of Development Services Department or Director's designee to verify that renewable diesel is used for 100 percent of total energy use by the generators or demonstrate a good faith effort	Following commencement of project operation then annually for the life of the project.	City of Hayward Director of Development Services Department or Director's designee.	Review documentation and verify the project is using renewable diesel.	Following commencement of project operation then annually for the life of the project.

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
GREENHOUSE GAS EMISSIONS					
practicable. The project owner shall provide an annual report of the status of procuring and using renewable diesel to the director, or director's designee, of the City of Hayward Development Services Department demonstrating compliance with the mitigation measure.	to comply with the requirement and that compliance is not practical.				
GHG-3: Prior to the issuance of any grading or building permits, whichever occurs earliest, the project owner shall submit final design to the director, or director's designee, of the City of Hayward Development Services Department for approval, demonstrating compliance with the CALGreen Tier 2 off-street electric vehicle requirements and City of Hayward EV Charging Reach Code (Hayward Municipal Code Section 10-2.800). Upon completion of construction, the project owner shall provide documentation to the director, or director's designee, of the City of Hayward Development Services Department, confirming compliance with these requirements.	Provide final design and documentation to the City of Hayward Director of Development Services Department or Director's designee to demonstrate compliance with EV requirements.	During construction and upon completion of construction.	City of Hayward Director of Development Services Department or Director's designee.	Review final design and documentation and verify the project complies with EV requirements.	Prior to the issuance of any demolition, grading, and/or building permits (whichever occurs earliest) and upon completion of construction.

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HAZARDS AND HAZARDOUS MATERIALS					
Impact 5.9-a Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
HAZ-1: Prior to issuance of demolition permits, a lead-based paint (LBP) visual inspection and pre-demolition survey, including sampling and testing of suspect materials, shall be conducted of on-site buildings to determine the presence of LBP. The survey shall be conducted by a contractor with a Lead Related Construction certification issued by the California Department of Public Health. The findings of the LBP survey shall be submitted to the Hayward Fire Department for review.	Conduct an LBP visual inspection and a pre-demolition LBP survey of the on-site buildings. Prepare a report of LBP survey findings and submit it to the Hayward Fire Department for review.	Prior to issuance of demolition permits, and prior to start of Project construction.	Hayward Fire Department.	Review submitted documentation/report to verify presence of LBP onsite after pre-demolition survey.	After LBP pre-demolition survey and prior to issuance of demolition permits. Prior to start of Project construction.
Impact 5.9-d Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
HAZ-2: Prior to issuance of demolition or grading permits, the project applicant shall prepare a Site Management Plan (SMP) to guide activities during demolition, excavation, and initial construction to ensure that potentially contaminated	Prepare and implement a SMP. Submit the SMP for review and approval to the Hayward Fire	Prior to issuance of demolition or grading permits, prior to soil and groundwater	If no soil or groundwater contaminants exceeding applicable ESLs are identified, Hayward Fire	Review and approve submitted SMP. Review submitted documentation/report of results of soil and groundwater site	Prior to issuance of any grading, demolition, or building permits, prior to and during handling and removal of

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HAZARDS AND HAZARDOUS MATERIALS					
<p>soils and groundwater are identified, characterized, removed, and disposed of properly. The purpose of the SMP is to establish appropriate management practices for handling impacted soil or other materials that may be encountered during construction activities. The SMP shall be reviewed and approved by the Hayward Fire Department and the Alameda County Department of Environmental Health prior to any work on the site, including prior to soil and groundwater sampling.</p> <p>The SMP shall be implemented during project demolition and construction and shall include but shall not be limited to, the following components:</p> <ul style="list-style-type: none"> A detailed discussion of the site background, current conditions of on-site soil, groundwater and soil gas; Description of soil and groundwater testing to verify the presence or absence of remnant or unknown soil or groundwater 	<p>Department and the Alameda County Department of Environmental Health.</p> <p>If no soil or groundwater contaminants exceeding applicable ESLs are identified, submit the SMP for review and approval to the Hayward Fire Department and the Alameda County Department of Environmental Health.</p> <p>If soil or groundwater contaminants exceeding</p>	<p>sampling, and prior to the start of and during construction.</p>	<p>Department and the Alameda County of Environmental Health.</p> <p>If soil or groundwater contaminants exceeding applicable ESLs are identified, Hayward Fire Department, California Department of Toxic Substances Control under a Site Cleanup Program, State Water Resources Control Board (SWRCB), or the Alameda County of Environmental Health.</p>	<p>characterization to verify presence or absence and levels of contamination.</p> <p>Provide regulatory oversight for site characterization and remediation in the event of identification of contaminated soil or groundwater.</p> <p>Provide verification of regulatory compliance to Hayward Fire Department and the Alameda County of Environmental Health.</p>	<p>any identified contaminated soil or groundwater, and prior to the start of and during construction.</p>

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HAZARDS AND HAZARDOUS MATERIALS					
<p>contamination. The testing shall include (but not be limited to) the collection and analyses of soil samples for agricultural chemicals, including organochlorine pesticides, and collection and analysis of groundwater samples for volatile organic compounds (VOCs) and any other contaminants identified in previous environmental studies in the vicinity of the project. This soil and groundwater characterization shall be performed via testing prior to initiation of project demolition or construction.</p> <ul style="list-style-type: none"> Protocols for sampling of soil and groundwater to facilitate the profiling of the soil and groundwater for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during demolition and construction and potential exposure of contaminated soil or groundwater to future users of 	<p>applicable ESLs are identified, obtain regulatory oversight from the agency with jurisdictional authority for characterization and remediation oversight. Submit the SMP and planned remedial measures for review and approval to the oversight agency. Submit a copy of the SMP to the Hayward Fire Department and the Alameda County Department of Environmental Health.</p>				

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HAZARDS AND HAZARDOUS MATERIALS					
<p>the site prior to project construction.</p> <p>Procedures to be undertaken in the event that contamination is identified applicable screening levels or previously unknown contamination is discovered prior to or during project demolition or construction.</p> <ul style="list-style-type: none"> • Notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction; • Onsite soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy; • Sampling and laboratory analyses from a certified environmental laboratory of excess soil requiring disposal at an appropriate off-site waste disposal facility; 					

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HAZARDS AND HAZARDOUS MATERIALS					
<ul style="list-style-type: none"> Procedures and protocols for the safe storage, stockpiling, and disposal of contaminated soils; and Protocols to manage groundwater, including segregation or treatment of contaminated groundwater, if necessary, that may be encountered during trenching or subsurface excavation activities. <p>If there are no contaminants identified on the project site that exceed applicable screening levels for construction workers and residential users published by the Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), or Cal EPA, the SMP and testing results do not need to be submitted to an oversight agency and instead only need to be submitted to the Alameda County Department of Environmental Health (ACDEH), and the Hayward Fire Department (HFD) for approval</p>					

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HAZARDS AND HAZARDOUS MATERIALS					
<p>prior to issuance of a grading permit and prior to conducting any demolition activities.</p> <p>If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant shall obtain regulatory oversight from appropriate regulatory agency (HFD, DTSC, ACDEH or SWRCB). The SMP and planned remedial measures shall be reviewed and approved by the ACDEH, HFD, DTSC, and/or SWRCB, as appropriate to the contaminated media. A copy of the SMP shall be submitted to the Director or Director's designee with the ACDEH and the Hayward Fire Department. Copies of the approved SMP shall be kept at the project site.</p> <p>Any contaminated soils and/or groundwater identified by testing conducted in compliance with the SMP and found in concentrations above established thresholds shall be removed and disposed of according to HWCL under the oversight of</p>					

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HAZARDS AND HAZARDOUS MATERIALS					
applicable regulatory agency. Contaminated soil excavated and contaminated groundwater extracted from the site shall be transported off- site and disposed of at a permitted disposal facility.					
HAZ-3: All contractors and subcontractors at the project site shall develop a Health and Safety Plan (HSP) specific to their scope of work and based upon the known environmental conditions for the site prior to project construction. The HSP shall be prepared by an industrial hygienist. The HSP shall be approved by the Director of the Department of Development Services or the Director's designee and implemented under the direction of a Site Safety and Health Officer. The HSP shall include, but shall not be limited to, the following elements, as applicable: <ul style="list-style-type: none"> A description of potential health and safety hazards; 	Prepare and implement HSPs. Submit the HSPs for review and approval to the Hayward Fire Department and the Alameda County Department of Environmental Health.	Prior to the start of construction.	Hayward Fire Department and the Alameda County Department of Environmental Health.	Review and approve submitted HSPs.	Prior to the start of construction.

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HAZARDS AND HAZARDOUS MATERIALS					
<ul style="list-style-type: none"> • A description of applicable regulations and standards to be implemented for the project site; • Provisions for personal protection and monitoring exposure to construction workers; • Education for workers in the proper use of personnel protection; • Provisions for Hazard Communication Standard (HAZCOM) worker training and education including information about HAZCOM labeling, copies of • Safety Data Sheets for any hazardous materials that may be used onsite; • Identification of workers, supervisor, and employer health and safety responsibilities; and • A description of emergency procedures and identification of responsible personnel to contact in event of an emergency. Include contact information for 					

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HAZARDS AND HAZARDOUS MATERIALS					
responsible personnel and other emergency contact numbers. Copies of the approved HSPs shall be kept at the project site.					

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NOISE					
Impact 5.13-a Would the project result in 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?					
NOI-1: The project shall implement the following mitigation measures related to construction noise: <ul style="list-style-type: none"> All project construction activities shall occur between 7:00 A.M. and 7:00 P.M. Monday through Friday pursuant to the hours and days specified in the Hayward General Plan Policy HAZ-8.21. All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with manufacturers' recommended mufflers and be maintained in good working condition. All mobile or fixed noise-producing equipment used during project construction that are regulated for noise output by a federal, state, or local agency shall comply with such regulations. 		During the entire project construction phase.	City of Hayward Development Services Department.	Receive the notification that all adjacent businesses and other noise-sensitive land uses have been notified of construction schedule.	Prior to the start of construction.
	Notify all adjacent business and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses. Then, notify the city that this	Prior to the start of construction	City of Hayward Development Services Department.	Receive disturbance coordinator contact information.	Prior to the start of construction.

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NOISE					
<ul style="list-style-type: none"> Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise sensitive uses. Project construction speed limits shall be established and enforced during the entire construction period. 	<p>action has been taken. Appoint a noise control disturbance coordinator and notify the city of the coordinator's contact information.</p>				

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HYDROLOGY AND WATER QUALITY					
<p>Impact 5.10 a, Would the project violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</p> <p>Impact 5.10 b, iii. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would: 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?</p>					
<p>HYD-1: Construction Best Management Practices The project would be required to implement the following construction BMPs as part of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project to ensure construction-related water quality impacts are less than significant.</p> <p>Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: 1) start of the rainy season; 2) site dewatering activities; or 3) street washing activities; and 4) saw cutting asphalt or concrete, or to retain any debris or dirt flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and</p>	Apply with the local RWQCB for coverage under the NPDES General Construction Permit. Prepare required SWPPP. Implement appropriate BMPs during project construction.	Apply for General Construction NPDES Permit prior to project construction.	City of Hayward Public Works.	Submit periodic stormwater monitoring reports to RWQCB.	Monitoring timing determined by General Construction NPDES Permit and submitted SWPPP.

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HYDROLOGY AND WATER QUALITY					
<p>prevent street flooding. Dispose of filter particles in the trash.</p> <p>Create a contained and covered area on the site for the storage of bags of cement, paints, flammables, oils, fertilizers, pesticides or any other materials used on the project site that have the potential for being discharged to the storm drain system through being windblown or in the event of a material spill.</p> <p>Never clean machinery, tools, brushes, etc., or rinse containers into a street, gutter, storm drain or stream. See "Building Maintenance/Remodeling" flyer for more information.</p> <p>Ensure that concrete/gunite supply trucks or concrete/plaster finishing operations do not discharge wash water into street gutters or drains.</p> <p>The applicant/developer shall immediately report any soil or water contamination noticed during construction to the City Fire Department Hazardous Materials Division, the Alameda County</p>					

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HYDROLOGY AND WATER QUALITY					
<p>Department of Health and the Regional Water Quality Control Board.</p> <p>No site grading shall occur during the rainy season, between October 15 and April 15, unless approved erosion control measures are in place.</p> <p>Non-storm water discharges to the City storm sewer system are prohibited. Prohibited discharges include but are not limited to the following: polluted cooling water, chlorinated or chloraminated swimming pool water, hazardous or toxic chemicals, grease, animal wastes, detergents, solvents, pesticides, herbicides, fertilizers, and dirt. All discharges of material other than storm water must comply with a National Pollutant Discharge Elimination System (NPDES) Permit issued for the discharge other than NPDES Permit No. CAS612008.</p>					

Source: California Energy Commission. Initial Study for the STACK SVY03A Data Center Campus. March 2025.

Appendix D

Mailing List

Appendix D: Mailing List

The following is the mailing list for the STACK SVY03A Data Center Campus project.

The following is a list of the State agencies that received State Clearinghouse notices and documents:

- California Air Resources Board (ARB)
- California Department of Fish and Wildlife, Bay Delta Region 3 (CDFW)
- California Department of Transportation, District 4 (DOT)
- California Department of Conservation
- California Emergency Management Agency
- California Energy Commission
- California Native American Heritage Commission (NAHC)
- California Natural Resources Agency
- California Public Utilities Commission (CPUC)
- California Regional Water Quality Control Board, Region 2 (RWQCB)
- Department of Toxic Substances Control
- Department of Parks & Recreation
- Office of Historic Preservation
- S.F. Bay Conservation & Development Commission
- State Water Resources Control Board, Division of Water Quality

Table D-1 presents the list of occupants and property owners contiguous to the project site and a list of property owners within 1,000 feet of the project site and 500 feet of project linears.

Table D-2 presents the list of agencies, including responsible and trustee agencies.

Table D-3 presents the list of interested parties.

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
CLAWITER INNOVATION LLC	101 CALIFORNIA ST 1000	SAN FRANCISCO	CA	94111
GRAND ARDEN LLC	105 LAKEWOOD CIR	SAN MATEO	CA	94402
COHN STEPHEN T & ANDREA G TRS	1408 CHAPIN AVE 4	BURLINGAME	CA	94010
SI SVYL3 LLC	1600 BROADWAY 1320	DENVER	CO	80202
ELEVATE PROPCO VII LLC	180 SUTTER ST 400	SAN FRANCISCO	CA	94104
DCT ARDEN ROAD LLC	1800 WAZEE ST	DENVER	CO	80202
CENTERPOINT PROPERTIES TRUST	1808 SWIFT DR	OAK BROOK	IL	60523
HAYWARD POINT EDEN I LIMITED P	1920 MAIN ST 1200	IRVINE	CA	92614
BMP EDEN LLC	2400 BROADWAY 130	REDWOOD CITY	CA	94063
MCEUEN DAVID W & DEBORAH K TRS	2516 SAN CARLOS AVE	CASTRO VALLEY	CA	94546
MTV BAY AREA PROPERTIES LLC	2550 SKYFARM DR	HILLSBOROUGH	CA	94010
ROHM AND HAAS CHEMICALS - LLC	25500 WHITESELL ST	HAYWARD	CA	94545
CLAWITER INNOVATION LLC	25830 CLAWITER RD	HAYWARD	CA	94545
CLAWITER INNOVATION LLC	25830 CLAWITER RD # FP	HAYWARD	CA	94545
CLAWITER INNOVATION LLC	25830 CLAWITER RD 1	HAYWARD	CA	94545
CENTERPOINT PROPERTIES TRUST -	25858 CLAWITER RD	HAYWARD	CA	94545
MATAGRANO INC	25858 CLAWITER RD	HAYWARD	CA	94545
SOUTHBOUND LOGISTICS	25864 CLAWITER RD	HAYWARD	CA	94545
GOODYEAR	25880 CLAWITER RD	HAYWARD	CA	94545
CENTERPOINT PROPERTIES TRUST	25880 CLAWITER RD	HAYWARD	CA	94545
PROCRAFT EQUIPMENT LLC	25886 CLAWITER RD	HAYWARD	CA	94545
BIG JOE CALIFORNIA NORTH - INC	25932 EDEN LANDING RD	HAYWARD	CA	94545
RBK EDEN LLC	25932 EDEN LANDING RD	HAYWARD	CA	94545
RBK EDEN LLC	25936 EDEN LANDING RD	HAYWARD	CA	94545
CBA COLLECTION BUREAU OF AMERI	25954 EDEN LANDING RD 1ST F	HAYWARD	CA	94545
OUTSOURCEIT INC	25954 EDEN LANDING RD 2ND F	HAYWARD	CA	94545
1031 STRATEGIES & SERVICES GRO	25954 EDEN LANDING RD	HAYWARD	CA	94545
DELUNA R M & M F TRS & DELUNA	25954 EDEN LANDING RD	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
DELUNA R M & M F TRS & DELUNA INVESTMENTS LLC	25954 EDEN LANDING RD # 200	HAYWARD	CA	94545
INTRINSIC TEXTILES GROUP	25954 EDEN LANDING RD 200	HAYWARD	CA	94545
WAY TO BE DESIGNS	25954 EDEN LANDING RD 200	HAYWARD	CA	94545
FORCA FOODS LLC	25954 EDEN LANDING RD SUITE 200	HAYWARD	CA	94545
GILLIG LLC	25972 EDEN LANDING RD	HAYWARD	CA	94545
ARKAY LAND LLC	25974 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	2600 EDEN LANDING BLVD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26001 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26003 EDEN LANDING RD	HAYWARD	CA	94545
ATHINEON	26005 EDEN LANDING RD	HAYWARD	CA	94545
HABIBI BIRRIA	26005 EDEN LANDING RD	HAYWARD	CA	94545
PAPAITO ROTISSERIE	26007 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26009 EDEN LANDING RD	HAYWARD	CA	94545
IT LESS INC	26010 EDEN LANDING RD 10	HAYWARD	CA	94545
ENDRIES INTERNATIONAL INC	26010 EDEN LANDING RD 1A	HAYWARD	CA	94545
CREST GOOD MFG CO INC	26010 EDEN LANDING RD 5	HAYWARD	CA	94545
THE VEGAN GARDEN	26010 EDEN LANDING RD 8	HAYWARD	CA	94545
GUNDAM LABS STUDIO	26010 EDEN LANDING RD	HAYWARD	CA	94545
NORTHERN CALIFORNIA DRUG TESTI	26010 EDEN LANDING RD 1C	HAYWARD	CA	94545
AL DAWGS	26010 EDEN LANDING RD 7	HAYWARD	CA	94545
EDGEWATER PIZZA	26011 EDEN LANDING RD	HAYWARD	CA	94545
AZEYLIA BOUDOIR	26013 EDEN LANDING RD	HAYWARD	CA	94545
PLATINUM VAPES - INC	26013 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26025 EDEN LANDING RD	HAYWARD	CA	94545
ANTIGUA COFFEE SHOP	26027 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26027 EDEN LANDING RD	HAYWARD	CA	94545
QUEENS INVESTMENTS LLC	26029 EDEN LANDING RD	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
STARRLISH HAIR	26029 EDEN LANDING RD	HAYWARD	CA	94545
THE TOTAL PACKAGE HAIR LOSS CE	26029 EDEN LANDING RD	HAYWARD	CA	94545
HOUSE OF QIANA	26031 EDEN LANDING RD	HAYWARD	CA	94545
OISHII SUSHI	26033 EDEN LANDING RD	HAYWARD	CA	94545
A.M. SWEEPER INC	26034 EDEN LANDING RD	HAYWARD	CA	94545
SI SVY03 - LLC	26034 EDEN LANDING RD	HAYWARD	CA	94545
COHN STEPHEN T & ANDREA G TRS	26035 EDEN LANDING RD	HAYWARD	CA	94545
STUDIO GUAPELE	26037 EDEN LANDING RD	HAYWARD	CA	94545
SI SVYL3 LLC	26046 EDEN LANDING RD	HAYWARD	CA	94545
VITABIOLOGIC INC	26046 EDEN LANDING RD 3	HAYWARD	CA	94545
GOLD STALLION LLC	26046 EDEN LANDING RD 5	HAYWARD	CA	94545
MONARCH LASER SERVICES	26062 EDEN LANDING 8	HAYWARD	CA	94545
SI SVYL3 LLC	26062 EDEN LANDING RD	HAYWARD	CA	94545
CATALYST ENVIRONMENTAL INC	26062 EDEN LANDING RD 3	HAYWARD	CA	94545
CALIFORNIA MULTI HOUSING SERVI	26062 EDEN LANDING RD 7	HAYWARD	CA	94545
VERDANT ROBOTICS INC	26062 EDEN LANDING RD STE 6	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26101 EDEN LANDING RD	HAYWARD	CA	94545
ONDAVIA INC	26102 EDEN LANDING RD 1	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 1	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 2	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 3	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 4	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 5	HAYWARD	CA	94545
BMP EDEN LLC	26102 EDEN LANDING RD # 6	HAYWARD	CA	94545
ALONG BIOSCIENCES - INC	26102 EDEN LANDING RD 2	HAYWARD	CA	94545
ACUREN INSPECTION - INC.	26102 EDEN LANDING RD 3	HAYWARD	CA	94545
JELLYARTZ	26102 EDEN LANDING RD STE 2	HAYWARD	CA	94545

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Name	Address	City	State	Zip
ARCUS BIOSCIENCES	26118 RESEARCH DR	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED P	26118 RESEARCH RD	HAYWARD	CA	94545
CESAR S GERARDO INSURANCE BROK	26120 EDEN LANDING RD 5	HAYWARD	CA	94545
CLICK 4 TRUCK	26120 EDEN LANDING RD 5	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 1	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 2	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 3	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 4	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 5	HAYWARD	CA	94545
BMP EDEN LLC	26120 EDEN LANDING RD # 6	HAYWARD	CA	94545
FORCE SUPPORT SERVICES INC	26120 EDEN LANDING RD #3	HAYWARD	CA	94545
ADVANCED CHEMBLOCK INC	26120 EDEN LANDING RD 1	HAYWARD	CA	94545
INVITEK - INC	26120 EDEN LANDING RD 1	HAYWARD	CA	94545
WORLD ASIA LOGISTICS INC	26120 EDEN LANDING RD 2	HAYWARD	CA	94545
AIM BLIND & DRAPERY	26120 EDEN LANDING RD 6	HAYWARD	CA	94545
POTRERO MEDICAL - INC	26142 EDEN LANDING RD	HAYWARD	CA	94545
GOLDEN STATE LAUNDRY SYSTEMS	26203 PRODUCTION AVE	HAYWARD	CA	94545
I. TUNGGAL INSURANCE	26203 PRODUCTION AVE 12A	HAYWARD	CA	94545
ALLIED CARGO SERVICES	26203 PRODUCTION AVE 2	HAYWARD	CA	94545
HAPP SUPPLY COMPANY	26203 PRODUCTION AVE 2	HAYWARD	CA	94545
MAWI DNA TECHNOLOGIES	26203 PRODUCTION AVE 3	HAYWARD	CA	94545
SCHEIDT & BACHMANN USA	26203 PRODUCTION AVE 6	HAYWARD	CA	94545
J & C SAFETY 1ST FIRE PROTECTI	26203 PRODUCTION AVE 8	HAYWARD	CA	94545
SI SVYL3 LLC	26203 PRODUCTION AVE	HAYWARD	CA	94545
SPOT ON SCIENCES	26203 PRODUCTION AVE UNIT 7	HAYWARD	CA	94545
MULTISPAN - INC	26219 EDEN LANDING RD	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26219 EXECUTIVE PL	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26221 EXECUTIVE PL	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26223 EXECUTIVE PL	HAYWARD	CA	94545
NELUMBO INC	26225 EDEN LANDING RD D	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26225 EDEN LANDING RD	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26225 EXECUTIVE PL	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26227 EXECUTIVE PL	HAYWARD	CA	94545
MICROVI BIOTECH INC	26229 EDEN LANDING RD	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26229 EXECUTIVE PL	HAYWARD	CA	94545
BRITANNIA POINT EDEN BUSINESS	26236 EXECUTIVE PL	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	26236 EXECUTIVE PL	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L	26250 EDEN LANDING RD	HAYWARD	CA	94545
B9 SEQUOIA CENTER OWNER LP	26250-26260 EDEN LANDING RD	HAYWARD	CA	94544
AERIS TECHNOLOGIES INC	26252 EDEN LANDING RD	HAYWARD	CA	94545
APPLIED SILVER INC	26254 EDEN LANDING RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	26256 EDEN LANDING RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	26258 EDEN LANDING RD	HAYWARD	CA	94545
PLATRON COMPANY WEST	26260 EDEN LANDING RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	26260 EDEN LANDING RD	HAYWARD	CA	94545
CHEN - KENT K. CPA	26291 PRODUCTION AVE 201	HAYWARD	CA	94545
SI SVYL3 LLC	26291 PRODUCTION AVE	HAYWARD	CA	94545
FROG ENVIRONMENTAL INC	26291 PRODUCTION AVE 10	HAYWARD	CA	94545
CMSP ASSOCIATES LLC	26291 PRODUCTION AVE 9	HAYWARD	CA	94545
ELLA V'S	26291 PRODUCTION AVE 9	HAYWARD	CA	94545
AMAZON DATA SERVICES INC	26415 CORPORATE AVE	HAYWARD	CA	94545
HAYWARD DC BUILDING LLC	26415 CORPORATE AVE	HAYWARD	CA	94545
HAYWARD DC BUILDING LLC	3140 PEACEKEEPER WAY 101	MCCLELLAN PARK	CA	95652
BKN PARTNERS LLC	3200 ARDEN RD	HAYWARD	CA	94545
THERM-X OF CALIFORNIA	3200 INVESTMENT BLVD	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
ELEVATE PROPCP VII LLC	3202 INVESTMENT BLVD	HAYWARD	CA	94545
KG INVESTMENT PROPERTIES	3202 INVESTMENT BLVD	HAYWARD	CA	94545
ELEVATE PROPCO VII LLC	3210 INVESTMENT BLVD	HAYWARD	CA	94545
P G & E CO 135-1-58D-1	3240 INVESTMENT BLVD	HAYWARD	CA	94545
P G & E CO 135-1-58D-1	3250 INVESTMENT BLVD	HAYWARD	CA	94545
FREUND BAKING CO	3265 INVESTMENT BLVD	HAYWARD	CA	94545
3265 INVESTMENT BOULEVARD LLC	3265 INVESTMENT BLVD	HAYWARD	CA	94545
ABC COOLING - HEATING - & PLUMBI	3266 INVESTMENT BLVD	HAYWARD	CA	94545
ROHM & HAAS CALIFORNIA INCORPO	332 HIGHWAY 332 E	LAKE JACKSON	TX	77566
LAKEPORT GROUP LLC	3323 INVESTMENT BLVD	HAYWARD	CA	94545
KATHERIN STEFANAC BABAN	3324 INVESTMENT BLVD	HAYWARD	CA	94545
TLC NURSE SOLUTIONS	3324 INVESTMENT BLVD	HAYWARD	CA	94545
THERM-X OF CALIFORNIA INC	3325 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3347 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3349 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3351 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3353 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3355 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3357 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3359 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3361 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3363 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3365 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3367 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3369 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3371 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3373 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3375 INVESTMENT BLVD	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
LAKEPORT GROUP LLC	3377 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3379 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3381 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3383 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3385 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3387 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3389 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3391 INVESTMENT BLVD	HAYWARD	CA	94545
CUSTOM LABEL & DECAL - LLC	3392 INVESTMENT BLVD	HAYWARD	CA	94545
DIONNE ENTERPRISES -INC.	3392 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3393 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3395 INVESTMENT BLVD	HAYWARD	CA	94545
DIONNE ENTERPRISES - INCORPORAT	3396 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3397 INVESTMENT BLVD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3399 INVESTMENT BLVD	HAYWARD	CA	94545
2 BIT PROPERTIES LLC	3400 INVESTMENT BLVD	HAYWARD	CA	94545
ACTION LAMINATES - LLC	3400 INVESTMENT BLVD	HAYWARD	CA	94545
DRIVEN AUTO WHOLESALE - LLC	3401 INVESTMENT BLVD # 200	HAYWARD	CA	94545
SUNLIGHT TRANSPORT - INC	3401 INVESTMENT BLVD 12	HAYWARD	CA	94545
LAB'S COSTUMES	3401 INVESTMENT BLVD 14	HAYWARD	CA	94545
JEFF DUDE CONSULTING INC	3401 INVESTMENT BLVD 3	HAYWARD	CA	94545
SI SVYL3 LLC	3401 INVESTMENT BLVD	HAYWARD	CA	94545
GALAXY FREIGHT SYSTEM LLC	3401 INVESTMENT BLVD 200	HAYWARD	CA	94545
CAVALRY INSURANCE SERVICES	3401 INVESTMENT BLVD 203	HAYWARD	CA	94545
OUHOME - LLC	3401 INVESTMENT BLVD 206	HAYWARD	CA	94545
COURIER RX	3401 INVESTMENT BLVD 209	HAYWARD	CA	94545
MILTON'S ORTHODONTIC LAB - INC	3401 INVESTMENT BLVD 210	HAYWARD	CA	94545
SOAPY FAITH LLC	3401 INVESTMENT BLVD 6	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
GOLDEN GATE ORGANICS LLC	3401 INVESTMENT BLVD 9	HAYWARD	CA	94545
REMY'S AUTO SALES LLC	3401 INVESTMENT BLVD SUITE 8	HAYWARD	CA	94545
2 BIT PROPERTIES LLC	3412 INVESTMENT BLVD	HAYWARD	CA	94545
ONLY SERVE INC	3423 INVESTMENT BLVD 1	HAYWARD	CA	94545
ONE PLUS ONE WEDDING LLC	3423 INVESTMENT BLVD 10	HAYWARD	CA	94545
FOREVER LASTING BEAUTY	3423 INVESTMENT BLVD 3	HAYWARD	CA	94545
KRYPTOS BIOTECHNOLOGIES - INC	3423 INVESTMENT BLVD 6	HAYWARD	CA	94545
BK SOLUTIONS INC	3423 INVESTMENT BLVD	HAYWARD	CA	94545
AMPOWER DENTAL LAB	3423 INVESTMENT BLVD 11	HAYWARD	CA	94545
SAMEH ZAHDA	3425 INVESTMENT BLVD 7	HAYWARD	CA	94545
RIGO TOWING	3447 INVESTMENT BLVD 6	HAYWARD	CA	94545
SI SVYL3 LLC	3447 INVESTMENT BLVD	HAYWARD	CA	94545
CLASSICAL TRANSPORTATION INC	3447 INVESTMENT BLVD # 3	HAYWARD	CA	94545
BLUCAL	3447 INVESTMENT BLVD 1	HAYWARD	CA	94545
UNISOFT CORP	3447 INVESTMENT BLVD 3	HAYWARD	CA	94545
RO HEALTH LLC	3447 INVESTMENT BLVD 8	HAYWARD	CA	94545
VI INTERNATIONAL INC	3447 INVESTMENT BLVD 9-10	HAYWARD	CA	94545
IMUA FINANCIAL SERVICES	3447 INVESTMENT BLVD SUITE 205	HAYWARD	CA	94545
P G & E CO 135-1-58D-1	3450 INVESTMENT BLVD	HAYWARD	CA	94545
AUSCREE INC DBA ADAM SOLUTIONS	3474 INVESTMENT BLVD	HAYWARD	CA	94545
SI SVYL3 LLC	3475 INVESTMENT BLVD	HAYWARD	CA	94545
TST EXPRESS CORPORATION	3475 INVESTMENT BLVD 2	HAYWARD	CA	94545
STARS & STRIPES PROTECTIVE SER	3475 INVESTMENT BLVD 3	HAYWARD	CA	94545
LIFESAVER OF NORTHERN CALIFORN	3475 INVESTMENT BLVD 4	HAYWARD	CA	94545
ASPIRE HOME HEALTH	3475 INVESTMENT BLVD 5	HAYWARD	CA	94545
JAMV INC	3475 INVESTMENT BLVD 6	HAYWARD	CA	94545
CIP REAL ESTATE PROPERTY SERVI	3475 INVESTMENT BLVD STE 6	HAYWARD	CA	94545
WIEST - JOHANN - WALTRAUD & JOAC	3476 INVESTMENT BLVD 3476-80	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
Wiest JOACHIM H & KAREN M TRS & Wiest JOHANN ETAL	3476 INVESTMENT BLVD	HAYWARD	CA	94545
SI SVYL3 LLC	3477 INVESTMENT BLVD	HAYWARD	CA	94545
Wiest JOACHIM H & KAREN M TRS & Wiest JOHANN ETAL	3478 INVESTMENT BLVD	HAYWARD	CA	94545
Wiest JOACHIM H & KAREN M TRS & Wiest JOHANN ETAL	3480 INVESTMENT BLVD	HAYWARD	CA	94545
CORE & MAIN	3486 INVESTMENT BLVD	HAYWARD	CA	94545
J.E.L.'S MAGIC TOUCH	3486 INVESTMENT BLVD B	HAYWARD	CA	94545
RODAN INVESTMENTS LLC	3486 INVESTMENT BLVD B	HAYWARD	CA	94545
RODAN BUILDERS INC	3486 INVESTMENT BLVD SUITE B	HAYWARD	CA	94545
RODAN INVESTMENTS LLC	3490 INVESTMENT BLVD	HAYWARD	CA	94545
MING'S RESOURCE EAST BAY CORP	3495 BREAKWATER CT	HAYWARD	CA	94545
WSA BREAKWATER LLC	3495 BREAKWATER DR	HAYWARD	CA	94545
WSA BREAKWATER LLC	3495 BREAKWATER CT	HAYWARD	CA	94545
BREAKWATER BUSINESS PARK	3496 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3497 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3498 BREAKWATER CT	HAYWARD	CA	94545
CASA MARIA	3499 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3499 BREAKWATER AVE	HAYWARD	CA	94545
PAL & PAL ENTP - INC. DBA BREAK	3500 BREAKWATER AVE	HAYWARD	CA	94545
UNI PACIFIC LLC	3500 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3500 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3501 BREAKWATER AVE	HAYWARD	CA	94545
PROLINE CARPET MAINTENANCE SUP	3501 BREAKWATER CT	HAYWARD	CA	94545
SIERRA EQUIPMENT CO - LLC	3501 BREAKWATER CT	HAYWARD	CA	94545
YO-KAI EXPRESS	3501 BREAKWATER CT	HAYWARD	CA	94545
DAISO CALIFORNIA LLC	3502 BREAKWATER CT	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
IMSEL SPECIAL DELIVERY	3502 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3502 BREAKWATER CT	HAYWARD	CA	94545
MALCOLM DRILLING CO. -INC.	3503 BREAKWATER CT	HAYWARD	CA	94545
SANSUREUS INC	3505 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3506 BREAKWATER CT	HAYWARD	CA	94545
HARRENS LAB INC	3507 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3508 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3510 BREAKWATER CT	HAYWARD	CA	94545
AECO SYSTEMS INC	3512 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3513 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3514 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3515 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3516 BREAKWATER CT	HAYWARD	CA	94545
GENEVERIFY INC	3517 BREAKWATER AVE	HAYWARD	CA	94545
NOVODIAX INC	3517 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3519 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3520 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3521 BREAKWATER AVE	HAYWARD	CA	94545
BLACK MOUNTAIN HOLDING LLC	3521 INVESTMENT BLVD	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 1	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 2	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 3	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 4	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 5	HAYWARD	CA	94545
BMP EDEN LLC	3521 INVESTMENT BLVD # 6	HAYWARD	CA	94545
ABUNDANT ROBOTICS INC	3521 INVESTMENT BLVD 5	HAYWARD	CA	94545
AFFIMEDIX - INC	3521 INVESTMENT BLVD 5	HAYWARD	CA	94545
UNIMED INTERNATIONAL - INC.	3521 INVESTMENT BLVD 5	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
CRANBROOK REALTY INVESTMENT FUND LP	3522 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3523 BREAKWATER AVE	HAYWARD	CA	94545
SAFETY HUB LLC	3524 BREAKWATER AVE 102	HAYWARD	CA	94545
NORCAL AUTO WHOLESALERS INC	3524 BREAKWATER AVE A112	HAYWARD	CA	94545
AWESOME DEAL MOTORS INC	3524 BREAKWATER DR 115	HAYWARD	CA	94545
BOLVER COSMETICS USA INC	3524 BREAKWATER AVE	HAYWARD	CA	94545
DUANES CATERING & CONFECTIONS	3524 BREAKWATER AVE	HAYWARD	CA	94545
E-TRADE AUTO CONNECTION LLC	3524 BREAKWATER AVE # 108	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-101	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-102	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-103	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-104	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-105	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-106	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-107	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-108	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-109	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-110	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-111	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-112	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-113	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-114	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-115	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-116	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-117	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # A-118	HAYWARD	CA	94545
LYNEER STAFFING SOLUTIONS	3524 BREAKWATER AVE # A130	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # B	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # C	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # D	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # E	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # F	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # G	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # H	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # I	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # J	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # K	HAYWARD	CA	94545
MCEUEN DAVID W & DEBORAH K TRS & MORRIS MAX A TR	3524 BREAKWATER AVE # L	HAYWARD	CA	94545
SERVICE MASTER JANITORIAL BY P	3524 BREAKWATER AVE 101	HAYWARD	CA	94545
COMMUTER CARS AUTO DEALER	3524 BREAKWATER AVE 106	HAYWARD	CA	94545
ADVERTISING FOR RESULTS - INC	3524 BREAKWATER AVE 111	HAYWARD	CA	94545
CYC ENGINEERING INC	3524 BREAKWATER AVE 116	HAYWARD	CA	94545
AT HOME SUPPORT SENIOR CARE IN	3524 BREAKWATER AVE 117A	HAYWARD	CA	94545
OLOF IN HOME CARE - INC	3524 BREAKWATER AVE A-117	HAYWARD	CA	94545
VIPER GUNWERX LLC	3524 BREAKWATER AVE A-118	HAYWARD	CA	94545
AJ HOME HEALTH LLC	3524 BREAKWATER AVE C	HAYWARD	CA	94545
MEDTEK COLLEGE HAYWARD	3524 BREAKWATER AVE E	HAYWARD	CA	94545
MAJESTIC CARE TRANSPORTATION I	3524 BREAKWATER AVE STE A-107	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3524 BREAKWATER CT	HAYWARD	CA	94545
GLOBAL QUALITY FOODS INC	3524 INVESTMENT BLVD	HAYWARD	CA	94545
GLOBAL QUALITY SEAFOOD LLC	3524 INVESTMENT BLVD	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3525 BREAKWATER AVE	HAYWARD	CA	94545
JL PROPERTY MANAGEMENT	3526 INVESTMENT BLVD 218	HAYWARD	CA	94545
SIGNET TESTING LABORATORIES	3526 BREAKWATER CT	HAYWARD	CA	94545
D.L. FALK CONSTRUCTION	3526 INVESTMENT BLVD	HAYWARD	CA	94545
DTF PROPERTIES LLC	3526 INVESTMENT BLVD	HAYWARD	CA	94545
ERGONOMIC SEATING	3526 INVESTMENT BLVD	HAYWARD	CA	94545
TIM S HUI	3526 INVESTMENT BLVD	HAYWARD	CA	94545
BFC AUTO GROUP LLC	3526 INVESTMENT BLVD #219	HAYWARD	CA	94545
SILVER LINE TOWING	3526 INVESTMENT BLVD 207	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
SANSINTEK INC	3526 INVESTMENT BLVD 210	HAYWARD	CA	94545
19 AUTO PARTS LLC	3526 INVESTMENT BLVD 212	HAYWARD	CA	94545
AAPEX PROPERTY MANAGEMENT	3526 INVESTMENT BLVD 212	HAYWARD	CA	94545
TBON LAB LLC	3526 INVESTMENT BLVD 214	HAYWARD	CA	94545
PROFESSIONAL WINDOW CLEANING	3526 INVESTMENT BLVD 216	HAYWARD	CA	94545
M&M AUTO DEALER	3526 INVESTMENT BLVD 220	HAYWARD	CA	94545
JJPD REGISTRATION SERVICES	3526 INVESTMENT BLVD 221	HAYWARD	CA	94545
ULTRASIL LLC	3527 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3527 BREAKWATER AVE	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3528 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3529 BREAKWATER AVE	HAYWARD	CA	94545
GIANT FOODS CO	3530 ARDEN RD	HAYWARD	CA	94545
GRUBMARKET INC	3530 ARDEN RD	HAYWARD	CA	94545
UNITED PLUS - LLC	3530 BREAKWATER CT	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3531 BREAKWATER AVE	HAYWARD	CA	94545
GRAND ARDEN LLC	3532 ARDEN RD	HAYWARD	CA	94545
CORE DIAGNOSTICS - LLC	3535 BREAKWATER AVE	HAYWARD	CA	94545
CANTEEN REFRESHMENT SERVICES	3536 ARDEN RD	HAYWARD	CA	94545
DCT ARDEN ROAD LLC	3536 ARDEN RD	HAYWARD	CA	94545
SEAMODAL TRANSPORT CORPORATION	3540 ARDEN RD	HAYWARD	CA	94545
EARTH MECHANICS INC	3541 INVESTMENT BLVD 4	HAYWARD	CA	94545
BEYOND COMPONENTS LLC	3541 INVESTMENT BLVD	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 1	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 2	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 3	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 4	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 5	HAYWARD	CA	94545
BMP EDEN LLC	3541 INVESTMENT BLVD # 6	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
AB STUDIO INC	3541 INVESTMENT BLVD 3	HAYWARD	CA	94545
AB THERAPEUTICS INC	3541 INVESTMENT BLVD 3	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3542 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3544 ARDEN RD	HAYWARD	CA	94545
CRANBROOK REALTY INVESTMENT FUND LP	3545 BREAKWATER AVE	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3546 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3548 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L	3551 ARDEN RD	HAYWARD	CA	94545
MINERS & PISANI - INC	3551 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3553 ARDEN RD	HAYWARD	CA	94545
PREDICINE	3555 ARDEN RD	HAYWARD	CA	94545
AFFIMEDIX - INC	3556 INVESTMENT BLVD	HAYWARD	CA	94545
UNIMED INTERNATIONAL - INC.	3556 INVESTMENT BLVD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3557 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3558 INVESTMENT BLVD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3559 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3560 INVESTMENT BLVD	HAYWARD	CA	94545
PRAXIS CUSTOM SYSTEM DESIGN &	3561 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3562 INVESTMENT BLVD	HAYWARD	CA	94545
BMLOGIC INC	3563 INVESTMENT BLVD # 5	HAYWARD	CA	94545
STAFFING NETWORK - LLC	3563 INVESTMENT BLVD 1	HAYWARD	CA	94545
SHARPS SOLUTIONS LLC	3563 INVESTMENT BLVD 6	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3563 ARDEN RD	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD # 1	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD # 2	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD # 3	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD # 4	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
BMP EDEN LLC	3563 INVESTMENT BLVD # 5	HAYWARD	CA	94545
BMP EDEN LLC	3563 INVESTMENT BLVD # 6	HAYWARD	CA	94545
RUIFENG BIZTECH INC	3563 INVESTMENT BLVD 2	HAYWARD	CA	94545
LBC MUNDIAL CORPORATION	3563 INVESTMENT BLVD 3	HAYWARD	CA	94545
BINACEA PHARMA INC	3563 INVESTMENT BLVD 5	HAYWARD	CA	94545
MERCHANTS BUILDING MAINTENANCE	3564 INVESTMENT BLVD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3565 ARDEN RD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3566 INVESTMENT BLVD	HAYWARD	CA	94545
BMP EDEN LLC	3573 INVESTMENT BLVD	HAYWARD	CA	94545
B9 SEQUOIA BAY CENTER OWNER L P	3582 ARDEN RD	HAYWARD	CA	94545
CKK PARADISO INC	3583 INVESTMENT BLVD 7	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 1	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 2	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 3	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 4	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 5	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 6	HAYWARD	CA	94545
BMP EDEN LLC	3583 INVESTMENT BLVD # 7	HAYWARD	CA	94545
BERENDSEN FLUID POWER	3583 INVESTMENT BLVD 1	HAYWARD	CA	94545
QUINTARA BIOSCIENCES INC	3583 INVESTMENT BLVD 2	HAYWARD	CA	94545
LI LISING ENVIRO TECH LLC DBA	3584 ARDEN RD	HAYWARD	CA	94545
PREMIUM MEATS CO	3586 ARDEN RD	HAYWARD	CA	94545
QUAKER SALES & DISTRIBUTION IN	3586 ARDEN RD	HAYWARD	CA	94545
POSTMEDS - INC DBA TRUEPILL	3588 ARDEN RD	HAYWARD	CA	94545
LAKEPORT GROUP LLC	3726 LAS VEGAS BLVD S 2701	LAS VEGAS	NV	89158
WUEST JOACHIM H & KAREN M TRS	3744 TRENERY DR	PLEASANTON	CA	94588
NATIONAL TANK SERVICES	3751 BREAKWATER AVE	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3909 TRUST WAY	HAYWARD	CA	94545
OTSUKA AMERICA PHARMACEUTICAL	3911 TRUST WAY	HAYWARD	CA	94545
PROTEUS DIGITAL HEALTH INC	3911 TRUST WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3920 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3922 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3924 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3928 POINT EDEN WAY	HAYWARD	CA	94545
EIKON THERAPEUTICS INC	3929 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED P	3929 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3931 TRUST WAY	HAYWARD	CA	94545
JOHN ZINK CO LLC	3935 POINT EDEN WAY	HAYWARD	CA	94545
KOCH BIOLOGICAL SOLUTIONS LLC	3935 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3937 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3952 POINT EDEN WAY	HAYWARD	CA	94545
CHRONO THERAPEUTICS	3953 PT EDEN WAY	HAYWARD	CA	94545
SPOTLIGHT THERAPEUTICS INC	3953 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3954 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3955 POINT EDEN WAY	HAYWARD	CA	94545
HALIO INC	3955 TRUST WAY	HAYWARD	CA	94545
OTSUKA AMERICA PHARMACEUTICAL	3956 POINT EDEN WAY	HAYWARD	CA	94545
PROTEUS DIGITAL HEALTH INC	3956 POINT EDEN WAY	HAYWARD	CA	94545
PULSE BIOSCIENCES INC	3957 POINT EDEN WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3958 POINT EDEN WAY	HAYWARD	CA	94545
OTSUKA AMERICA PHARMACEUTICAL	3960 POINT EDEN WAY	HAYWARD	CA	94545
ARCUS BIOSCIENCES	3967 TRUST WAY	HAYWARD	CA	94545
PRIMUS POWER CORPORATION	3967 TRUST WAY	HAYWARD	CA	94545
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3979 TRUST WAY	HAYWARD	CA	94545
GOODBURGER - INC. DBA BAY CITY	3979 TRUST WAY 200	HAYWARD	CA	94545

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
HAYWARD POINT EDEN I LIMITED PARTNERSHIP	3980 POINT EDEN WAY	HAYWARD	CA	94545
ARKAY LAND LLC	451 DISCOVERY DR	LIVERMORE	CA	94551
CRANBROOK REALTY INVESTMENT FU	4701 SISK RD 101	MODESTO	CA	95356
3265 INVESTMENT BOULEVARD LLC	625 N OAKHURST	BEVERLY HILLS	CA	90210
DIONNE ENTERPRISES - INCORPORAT	7050 CARMELITA AVE	ATSCADERO	CA	93422
HAYWARD BREAKWATER LLC	92 NATOMA ST 400	SAN FRANCISCO	CA	94105
STATE OF CALIFORNIA	PO BOX 23440	OAKLAND	CA	94623
WSA BREAKWATER LLC	PO BOX 3075	SAN LEANDRO	CA	94578
P G & E CO 135-1-58D-2	PO BOX 770000	SAN FRANCISCO	CA	94177
HUDSON LAND CO LLC	PO BOX 8847416	SAN FRANCISCO	CA	94188
B9 SEQUOIA BAY CENTER OWNER L	PO BOX A3879	CHICAGO	IL	60690

TABLE D-2 AGENCIES

Name	Title	Agency	Address	City	State	Zip
ARIANA HUSAIN	PERMIT ENGINEER	BAY AREA AIR QUALITY MANGEMENT DISTRICT	375 BEALE STREET, SUITE 600	SAN FRANCISCO	CA	94105
GREG STONE	SUPERVISING AIR QUALITY ENGINEER	BAY AREA AIR QUALITY MANGEMENT DISTRICT	375 BEALE STREET, SUITE 600	SAN FRANCISCO	CA	94105
TAYLOR RICHARD	ASSOCIATE PLANNER	CITY OF HAYWARD - CITY HALL	777 B STREET	HAYWARD	CA	94541
ELIZABETH BLANTON	SENIOR PLANNER	CITY OF HAYWARD PLANNING DIVISION	ATTN: PLANNING DIVISION 777 B STREET, FIRST FLOOR	HAYWARD	CA	94541
PAMELA SVRDLIN	OPERATIONS SUPERVISOR	HAYWARD EXECUTIVE AIRPORT	20301 SKYWEST DR	HAYWARD	CA	94541
DOUGLAS MCNEELY	AIRPORT MANAGER	HAYWARD EXECUTIVE AIRPORT	20301 SKYWEST DR	HAYWARD	CA	94541
MIRIAM LENS	CITY CLERK	CITY CLERK'S OFFICE, CITY OF HAYWARD	777 B STREET, 4TH FLOOR	HAYWARD	CA	94541

TABLE D-2 AGENCIES

Name	Title	Agency	Address	City	State	Zip
MELISSA WILK	CLERK-RECORDER	ALAMEDA COUNTY CLERK-RECORDER'S OFFICE	1106 MADISON STREET	OAKLAND	CA	94607

TABLE D-3 INTERESTED PARTIES

First Name	Last Name	Organization	Address	City	State	Zip
JERRY HUTCHINSON	STRATEGIC ACCOUNTANT MANAGER	PACIFIC GAS & ELECTRIC	77 BEALE STREET	SAN FRANCISCO	CA	94105
ALEX STUKAN	PARALEGAL	ADAMS BROADWELL JOSEPH & CARDOZO	601 GATEWAY BOULEVARD, SUITE 1000	SOUTH SAN FRANCISCO	CA	94080-7037