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4.9 Hazards and Hazardous Materials

This discussion is based, in part, on a Phase I Environmental Site Assessment prepared for the project by EBI Consulting in March 2021. The report is included as Appendix F to this SPPE Application.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to

releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[44]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement

[44] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 11, 2020. https://www.epa.gov/superfund/superfund-cercla-overview.

authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[45]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[46]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Alameda County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA began phasing out use of friable asbestos products in 1973 and issued a ban in 1978 on manufacture, import, processing, and distribution of some asbestos-containing products and new uses of asbestos products.[47] The EPA is currently considering a proposed ban on on-going use of

[45] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[46] California Environmental Protection Agency. "Cortese List Data Resources." Accessed May 28, 2020. https://calepa.ca.gov/sitecleanup/corteselist/.
[47] United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed April 19, 2022. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos

asbestos.[48] National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Municipal Regional Permit Provision C.12.f

Polychlorinated biphenyls (PCBs) were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems.[49] Municipalities throughout the Bay Area are currently modifying demolition permit processes and implementing PCB screening protocols to comply with Provision C.12.f. 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 homes and wood-frame structures are exempt from these requirements.

Hayward Executive Airport Land Use Compatibility Plan

The project site is located within the jurisdiction of the Hayward Executive Airport Land Use Compatibility Plan (CLUP) overseen by the Alameda County Airport Land Use Commission (ALUC). The CLUP identifies potential conflicting land uses within the Airport Influence Area (AIA).

Hayward 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from

[48] Ibid.
[49] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

development projects within the City. The following policies are specific to hazards and hazardous materials and are applicable to the proposed project.

Policy	Description
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.
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.
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.
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.

4.9.1.2 *Existing Conditions*

Historic Site Uses

The project site was used for agricultural purposes from at least 1915 until the 1960s, when commercial buildings, such as a goldfish aquarium supply business and trucking business, were developed onsite. The trucking business occupied a portion of the northern area of the project site, but by 1968 the business was removed to facilitate construction of State Route 92. The current business park on the site was developed by 1973.

Onsite Conditions

The site is currently developed with nine commercial and industrial buildings in a business park setting. The one- to two-story buildings consist of multi-tenant warehouse/office/light-industrial structures totaling approximately 167,471 square feet. There are no basements beneath the structures. There are paved sidewalks, parking lots, accessways, and landscaping areas throughout the project site. An overhead electrical power line is located along the southwest boundary of the site. The businesses that currently occupy the site do not have any fuel or large-scale manufacturing operations. It is primarily office and warehouse space with limited light-industrial activities.

A site reconnaissance was completed on February 19, 2021. No evidence of substantial spills or improper handling of petroleum or hazardous substances were noted. Hazardous materials identified onsite were corrosive cleaning products and paint products that were stored properly with no leaks or spills. No underground storage tanks or aboveground storage tanks were observed or recorded onsite. The only oil-containing equipment identified onsite were transformer units, which were in good condition and no PCB content label was evident. A vapor migration screening

survey was completed and did not identify any conditions that would indicate a vapor migration condition exists onsite. Based on the survey and records review, no onsite environmental concerns were present.

Offsite Conditions of Surrounding Properties

The Phase I ESA did not identify any hazardous materials releases or recognized environmental conditions on nearby properties that would represent a concern to the project site.

Regulatory Agency Records Review

The project site is not included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.[50,51,52]

Other Hazards

Airport

The closest airport to the site is the Hayward Executive Airport, located approximately 1.7 miles to the northeast. The project site is within the AIA for the Airport. The AIA is an area where current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses.[53] The site is not within any of the noise contours or safety compatibility zones for the Airport.[54]

Wildland Fire Hazards

The project site is not located within a Very-High Fire Hazard Severity Zone for wildland fires. [55]

[50] California Environmental Protection Agency. Cortese List Data Resources. Accessed February 16, 2023. https://calepa.ca.gov/sitecleanup/corteselist/
[51] California Department of Toxic Substances Control. "EnviroStor." Accessed July 26, 2023. https://www.envirostor.dtsc.ca.gov/public/.
[52] State Water Resources Control Board. "GeoTracker." Accessed July 26, 2023. https://geotracker.waterboards.ca.gov/.
[53] Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-2 HWD and OAK Influence Area Overlap.
[54] Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-3 HWD Noise Compatibility Zones and Figure 3-4 HWD Safety Compatibility Zones.
[55] California Board of Forestry and Fire Protection. *SRA FHSZ Rollout Application*. November 21, 2022. Accessed July 26, 2023. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=fd937aba2b044c3484a642ae03c35677.

4.9.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hazards and hazardous materials, would the project:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
2) 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?
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4) 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?
5) 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, result in a safety hazard or excessive noise for people residing or working in the project area?
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

4.9.2.1 *Project 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?

Project operation would include the use and storage of diesel fuel for testing and maintenance of the backup generators. Some oils and lubricants could be stored on-site for maintenance of mechanical equipment. The project would be required to prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan in accordance with applicable laws and regulations to address the storage, use and delivery of renewable diesel and 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 tank would be continuously monitored electronically for the existence of liquids. Underground piping would also be of double-wall construction with interstitial leak detection. Upon detection of a leak, the fuel transfer process would be disabled, and the alarm would be generated at the building(s)' monitoring system to alert the operations team. 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 would park at the gated entrance to the generator yard for re-fueling. Spills associated with re-fueling would be reduced because each generator would be equipped with a spill catch basin at each fill port. 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. Additional measures, such as rubber pads, would be installed in the generator yard to block discharges from entering the storm sewer drains during fueling events.

To further minimize the potential of diesel fuel coming in contact with 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.

Urea or Diesel Exhaust Fluid (DEF) is used as part of the diesel engine combustion process to meet the emissions requirements. DEF would be stored in tanks within each generator enclosure. These tanks can be filled in place from other drums, totes, or bulk tanker truck at the tank top.

Hazardous materials storage at the proposed project would be regulated under applicable local, state and federal laws and 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 APSA must comply with all APSA requirements and prepare and implement a SPCC. The spill prevention measures described above would be required to be incorporated into the SPCC. Additionally, a Hazardous Materials Business Plan would be required to be completed for the safe storage and use of chemicals in accordance with all relevant laws and regulations. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. **(Less than Significant Impact)**

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?

Demolition

Due to the age of the existing buildings on site (pre-1980 construction), asbestos-containing materials (ACMs) and lead-based paint may be present. Demolition of the existing buildings on the project site could expose construction workers or residents in the vicinity of the project site to harmful levels of ACMs or lead. The project is required to conform to the following regulatory programs and to implement the following measures to reduce impacts to the presence of ACMs and/or lead-based paint:

- 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, Title 8, California Code of Regulations (CCR) 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. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, 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.

Conformance with aforementioned regulatory requirements will result in a less than significant impact from ACMs and lead. **(Less than Significant Impact)**

Construction

Construction activities may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. However, these potentially hazardous materials would not be of a type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment.

As described in Section 4.9.1.2 Existing Conditions, the project site was previously used for agricultural purposes and soils on-site could be contaminated with residual agricultural chemicals. 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. The following applicant-proposed project design measures would be implemented prior to construction to avoid significant hazard impacts to construction workers. The nearest residences are approximately 0.5 miles from the site, and not at risk from project construction.

Impact HAZ-1: Ground-disturbing construction activities could expose construction workers to soil contaminated with agricultural chemicals.

Applicant Proposed Project Design Measure:

PD HAZ-1.1: Site Management Plan. 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 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 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;
- Description of soil testing, which shall include (but not be limited to) the collection of shallow soil samples (upper one-foot) and analyses for lead and organochlorine pesticides to verify presence or absence of unknown soil contamination. This soil profiling shall be performed prior to initiation of project construction.
- Protocols for sampling of in-place soil to facilitate the profiling of the soil for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during demolition and construction and potential exposure of contaminated soil to future users of the site prior to project construction.
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered prior to or during project demolition or construction;
- Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during demolition or construction;
- Onsite petroleum contaminated soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
- Sampling and laboratory analyses 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 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 RWQCB, California Department of Toxic Substances (DTSC), or Environmental Protection Agency, the SMP does not need to be submitted to an oversight agency and instead only needs to be submitted to the City of Hayward prior to demolition activities.

If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant shall obtain regulatory oversight from the Alameda County Department of Environmental Health (ACDEH) or the DTSC under a Site Cleanup Program. The SMP and planned remedial measures shall be reviewed and approved by the ACDEH or DTSC. A copy of the SMP shall be submitted to the Director of the Department of Development Services or the Director's designee. Copies of the approved SMP shall be kept at the project site.

Any contaminated soils identified by testing conducted in compliance with the SMP and found in concentrations above established thresholds shall either be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the ACDEH or DTSC. Contaminated soil excavated from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

PD HAZ-1.2: Health and Safety Plan. 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 HSP shall be kept at the project site.

With implementation of the Applicant Proposed Project Design Measures described above, the proposed project would result in a less than significant impact due to potentially contaminated soil on-site. **(Less than Significant Impact)**

Operation

As described in the discussion under checklist question a), the proposed project would include the use and storage of diesel fuel for testing and maintenance of the backup generators associated with the data center. A Hazardous Materials Business Plan and a SPCC would be required to be completed for the safe storage and use of chemicals. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project.

Based on the analysis above, the project would not 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 during construction or operation. **(Less than Significant Impact)**

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?

The project site is not located within 0.25 mile of any existing or proposed schools. The closest school to the project site is Eden Gardens Elementary School, approximately 0.8 miles northwest of the site. There are no proposed schools within 0.25 mile of the project site. Therefore, the project would not emit hazardous emissions or handle hazardous materials, substances, or waste within one quarter mile of an existing or proposed school. **(No Impact)**

d) Would the project 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?

As noted in Section 4.9.1.2 Existing Conditions, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **(No Impact)**

e) If 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?

The nearest airport to the project site is Hayward Executive Airport, approximately 1.7-miles northeast of the project site. The project would be subject to the applicable safety and noise policies identified in the CLUP. While the site is located within the AIA for the Airport, it is not within an airport safety zone or noise contour.

According to the FAA Part 77 notification tool, the proposed project may impact the assurance of navigation signal reception. Therefore, the project is required to notify the FAA under Part 77 and receive a "Determination of No Hazard" prior to project approval. In doing so, the project would not result in aircraft safety hazards and would not result in a substantial safety hazard for people residing or working in the project area**. (Less than Significant Impact)**

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

The proposed project would be constructed to comply with all applicable building and fire codes. During construction and operation of the project, roadways would not be blocked such that emergency vehicles would be unable to access the site or surrounding properties. During operation, emergency ingress and egress to the project site would be provided by the surrounding roadways. The alignments of the drive aisles on-site and the radii of the corners and curbs would be adequate to accommodate the circulation of emergency vehicles (refer to Section 4.17 Transportation). The proposed project, therefore, would not impair or physically interfere with any adopted emergency response or evacuation plan. **(Less than Significant Impact)**

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project site is located in an urbanized area of Hayward. As described in Section 4.9.1.2 Existing Conditions, the project site is not located within a moderate, high, or very high fire hazard severity zone. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

4.9.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant hazards and hazardous materials impact?

The geographic area for cumulative hazards and hazardous materials impacts is the project site and immediate vicinity.

As described in the discussion under checklist question a, the proposed project would include the use and storage of diesel fuel for testing and maintenance of the backup generators associated with the data center. A Hazardous Materials Business Plan would be required to be completed for the safe storage and use of chemicals and a SPCC would be implemented. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project and ensure the project would not result in or substantially contribute to a significant cumulative impact related to the use and storage of hazardous materials.

No significant cumulative impacts associated with hazardous materials or contaminated soil/groundwater have been identified in the immediate project vicinity. The project would implement project design features as well as adhere to all applicable laws and regulations with respect to the remediation of existing soil and groundwater contamination on the project Site, thereby reducing contamination in the project vicinity. The project would not result in or substantially contribute to a cumulative impact related to soil and groundwater contamination. **(Less than Significant Cumulative Impact)**

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads (TMDLs) for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list" can be found on the on the SWRCB's website.[56]

National 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, which is also referred to as the base flood or 100-year flood.

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 prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk

[56] California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed August 16, 2023. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

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.[57] 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

[57] California 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.

(3) the project is located in a catchment or subwatershed that is highly developed (i.e., that is 70 percent or more impervious).[58]

Municipal Regional Permit Provision C.12.f

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 wasteload allocation in the Basin Plan by March 2030.[59] 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.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

City of Hayward 2040 General Plan

The Hayward 2040 General Plan (General Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to hydrology and water quality and are applicable to the proposed project.

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.

[58] The Hydromodification Applicability Maps developed the permittees under Order No. R2-2009-0074 were prepared using this standard, adjusted to 65 percent imperviousness to account for the presence of vegetation on the photographic references used to determine imperviousness. Thus, the maps for Order No. R2-2009-0074 are accepted as meeting the 70 percent requirement.

[59] California 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.

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.
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 HMC) 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).

East Bay Plain Subbasin Groundwater Sustainability Plan

In January 2022, the City of Hayward City Council adopted a Groundwater Sustainability Plan (GSP) for the East Bay Plain Subbasin. The East Bay Plain Subbasin Groundwater Sustainability Plan creates the framework for sustainable management of groundwater in the EBP Subbasin. The East Bay Municipal Utility District (EBMUD) and the City of Hayward are the water providers that lie atop the subbasin and became the exclusive groundwater sustainability agencies for the portions of the EBP Subbasin located beneath their service areas and have jointly prepared this GSP that meets the regulatory requirements listed in California Code of Regulations Title 23, Section 354 (Groundwater Sustainability Plans, Plan Contents).

4.10.1.2 *Existing Conditions*

Stormwater

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.[60]

[60] Alameda County Flood Control & Water Conservation District. Interactive Map: Alameda County Watersheds. Accessed August 21, 2023. https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds

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 sf. Approximately 87 percent (428,000 square feet) of the site is composed of impervious surfaces and the remaining 13 percent (64,000 square feet) 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 located in the Santa Clara Valley Groundwater Basin.[61] 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.[62]

Based on the Preliminary Geotechnical Report prepared for the project site, groundwater was encountered at a depth of approximately eight to nine feet bgs. Fluctuations in groundwater levels may occur due to seasonal changes, variations in rainfall, underground patterns, and other factors. Due to the proximity of the San Francisco Bay, the direction of groundwater flow may be tidally influenced and vary, however the presumed predominant direction of groundwater flow on-site is to the southwest.

Flood Hazards

FEMA has designated the project site and the surrounding vicinity as Zone X, Area of Minimal Flood Hazard.[63] Zone X encompasses areas determined to be outside of the 500-year flood and protected by levee from 100-year flood.[64]

Seiches, Tsunamis, and Mudflow Hazards

The project site is not located within a tsunami inundation area.[65] 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 the project site is approximately two miles away from the San Francisco Bay.

[61] City of Hayward. *Hayward 2040 General Plan Draft EIR*. January 30, 2014. Page 13-1.
[62] 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. https://www.hayward-ca.gov/sites/default/files/Draft%20C%26E%20Plan_022718.pdf
[63] Federal Emergency Management Agency (FEMA). Flood Rate Insurance Map 06001C0288G. Effective August 3, 2009.
[64] FEMA. "Zone C or X (Unshaded)." Accessed August 21, 2023. https://www.fema.gov/glossary/zone-c-or-x-unshaded#:~:text=Area%20of%20minimal%20flood%20hazard,or%20designation%20as%20base%20floodplain.
[65] California Department of Conservation. California Tsunami Maps and Data. Accessed August 21, 2023. https://www.conservation.ca.gov/cgs/tsunami/maps

4.10.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hydrology and water quality, would the project:

1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
3) 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:
    - result in substantial erosion or siltation on- or off-site;
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - 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
    - impede or redirect flood flows?
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.10.2.1 *Project Impacts*

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction Impacts

Construction activities (e.g., grading and excavation) on the project site may result in temporary impacts to surface water quality. When disturbance of underlying soils occurs, the surface runoff that flows across the site may contain sediments that are discharged into the storm drainage system. Construction of the project would disturb the entire approximately 11.3-acre project site. Since construction of the project would disturb more than one acre of soil, the project would be required to comply with the NPDES General Permit for Construction Activities. Because the project would include replacement of more than 5,000 square feet of impervious surfaces, the project would also be subject to the requirements of the RWQCB MRP. All development projects in 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.

Pursuant to City requirements, the following Applicant Proposed Project Design Measure would be required during construction to reduce potential construction-related water quality impacts.

Impact HYD-1: Construction activities (e.g., grading and excavation) on the project site may result in temporary impacts to surface water quality.

Applicant Proposed Project Design Measure:

PD HYD-1.1: 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.

Implementation of the applicant proposed project design measure would ensure that project construction would not substantially degrade surface water or groundwater quality.

Post-Construction Water Quality Impacts

The project surfaces would be approximately 81 percent impervious and 19 percent pervious, a six percent decrease in impervious surfaces compared to existing conditions. As noted under Construction Impacts above, the project is considered a regulated project under Provision C.3 of the MRP. As such, the project 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 under project operations do not exceed existing conditions 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 30-inch public stormdrain line in Investment Blvd.

In addition, the project includes site design and pollutant source control measures such as the use of drought-tolerant and water-conserving landscape materials. Implementation of these measures would reduce the rate of stormwater runoff while also removing pollutants. For these reasons, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality. **(Less than Significant Impact)**

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?

Although Hayward does not use groundwater as a regular water supply, the City maintains groundwater wells 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 area (buildings and parking), the project site is not considered an important groundwater recharge zone. The project would result in a six percent increase of pervious surface area on-site, thereby slightly increasing the opportunity for groundwater recharge to occur on-site.

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 matt foundational

slab and approximately 20 feet of excavation for rammed aggregate piers. Given that groundwater is located approximately eight to nine feet bgs on-site, temporary dewatering would be required and would not substantially contribute to the depletion of groundwater. 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. **(Less than Significant Impact)**

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 result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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 impede or redirect flood flows?

FEMA has designated the project site and the surrounding vicinity as Zone X, Area of Minimal Flood Hazard.[66] Zone X encompasses areas determined to be outside of the 500-year flood and protected by levee from 100-year flood.[67]

The project would not alter the course of a stream or river. As part of the development of the project, a SWPPP would be prepared in compliance with NPDES requirements and would ensure erosion or siltation impacts are less than significant. As discussed under project impact discussion a), the project would implement Applicant Proposed Project Design Measure PD HYD-1.1 to ensure construction activities do not result in increased soil erosion and siltation.

Bioretention basins would be located throughout the site to collect stormwater for treatment and detention before being conveyed off-site to an existing 30-inch storm drain in Investment Boulevard. The project would decrease the amount of impervious surfaces on the site and the proposed detention system would limit runoff from the proposed project. For these reasons, the project would not 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 result in substantial erosion or siltation on- or off-site. **(Less than Significant Impact)**

d) Would the project risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones?

As noted in section 4.10.1.2 Existing Conditions above, the project site is not located in a tsunami or

[66] Federal Emergency Management Agency (FEMA). Flood Rate Insurance Map 06001C0288G. Effective August 3, 2009.
[67] FEMA. "Zone C or X (Unshaded)." Accessed August 21, 2023. https://www.fema.gov/glossary/zone-c-or-x-unshaded#:~:text=Area%20of%20minimal%20flood%20hazard,or%20designation%20as%20base%20floodplain.

seiche hazard zone. Additionally, 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.[68, 69] Additionally, the project site is not in close proximity to any bodies of water that could experience a seiche. Therefore, the project would not risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

In January 2022, the City of Hayward City Council adopted a Groundwater Sustainability Plan for the East Bay Plain Subbasin. The Groundwater Sustainability Plan identifies the need for planning and specialized studies, ongoing monitoring of groundwater levels within the subbasin, and installation of new groundwater facilities. The project site is not located within an identified recharge zone. Furthermore, as discussed in Checklist Questions a) and b) above, through implementation of Applicant Proposed Project Design Measure PD HYD-1.1 and on-site bioretention basins, the project would be consistent with the City's Stormwater Management and Urban Runoff Control Ordinance and would not result in water quality impacts. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(Less than Significant Impact)**

4.10.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant hydrology and water quality impact?

The cumulative geographic area for hydrology is considered the Mount Eden Creek Watershed, which lies within a small industrial area completely contained to the City of Hayward. Build out of the proposed project and other projects in the cumulative scenario would involve redevelopment of existing developed and vacant sites with substantial impervious surfaces, and these cumulative projects would be required to conform to applicable General Plan goals, policies, and action statements as well as all other applicable laws and regulations regarding stormwater runoff, infrastructure and flooding. The proposed project would increase pervious surfaces, therefore decreasing the amount of stormwater runoff from the project site and would implement Applicant Proposed Project Design Measure PD HYD-1.1 to reduce potential surface and groundwater quality impacts during construction. In addition, the project would manage future stormwater runoff from the Project Site using LID-based treatment methods, in compliance with Provision C.3 of the MRP.

[68] Federal Emergency Management Agency (FEMA). Flood Rate Insurance Map 06001C0288G. Effective August 3, 2009.
[69] FEMA. "Zone C or X (Unshaded)." Accessed August 21, 2023. https://www.fema.gov/glossary/zone-c-or-x-unshaded#:~:text=Area%20of%20minimal%20flood%20hazard,or%20designation%20as%20base%20floodplain.

Cumulatively, any other projects of similar scale in the Mount Eden Creek Watershed and the City of Hayward would also be required to adhere to General Plan policies, standard permit conditions, and existing regulations to ensure hydrology and water quality impacts are avoided or minimized. The existing policies and regulations would reduce the hydrology and water quality impacts of the proposed project and cumulative projects in the area; therefore, the project would not result in significant cumulative impacts to hydrology and water quality. **(Less than Significant Cumulative Impact)**

4.11 Land Use and Planning

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Hayward 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to land use and are applicable to the proposed project.

Policy	Description
LU-6.2	Industrial and Warehouse Conversions. The City shall encourage the conversion of obsolete industrial and warehouse distribution space to a productive use, such as advanced manufacturing, professional office centers, corporate campuses, research and development parks, and flex space.
LU-6.3	Parcel Consolidation. The City shall promote the consolidation of small and irregular shaped parcels within the industrial Technology and Innovation Corridor to improve the economic feasibility of development projects.
LU-6.7	Design Strategies. The City shall encourage developments within the Industrial Technology and Innovation Corridors 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 façade treatments on all sides of building. - 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 and connect building entrances to sidewalks. - Use landscaped buffers with trees and attractive sound walls to screen adjacent residential areas and other sensitive uses.
LU-6.8	Employee Amenities. The City shall encourage the provision of employee-serving amenities for major employment uses within the Industrial Technology and Innovation Corridor, such as courtyards and plazas, outdoor seating areas, fitness facilities, bicycle storage areas, and showers.

4.11.1.2 *Existing Conditions*

General Plan and Zoning

The project site and surrounding area are designated Industrial Technology and Innovation Corridor (IC) in the General Plan and located within the Industrial Park (IP) zoning district.[70,71] The project site is surrounded by industrial uses to the west, south, and east. Commercial restaurant uses border the project site to the north.

The Industrial Technology and Innovation Corridor designation only applies to a specific area along Hayward's urban limit line and the southwestern city limits. Permitted uses within this designation include data centers, professional office uses, corporate campuses, research and development, warehousing and logistics, manufacturing, biotechnology, and high technology uses. 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. It is the intention of the City to grow this area ass an economic and employment center with a balance of traditional manufacturing and information and technology based uses. The maximum FAR is 0.8.

The Industrial Park zoning district applies to areas with larger parcel sizes with uniform streetscapes and to potential industrial park development. The intention of this district is to provide areas for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere. Permitted uses include a wide-variety of industrial, manufacturing, and high technology uses, specifically including "data processing centers" and "computer, technical, or informational services". 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. The maximum FAR is 0.8 (unless a greater FAR is approved through a Major Site Plan Review), the maximum building height is 75 feet (unless a height increase is approved through a Major Site Plan Review), and at a minimum 15 percent of the site needs to be landscaping.

Hayward Executive Airport

The Hayward Executive Airport is located approximately 1.75-miles northeast of the project site. The project site is located within the AIA. The project site is not located within any of the Airport's noise contours or within any safety zones for the Airport.

[70] City of Hayward. *Hayward 2040 General Plan Policy Document Figure LU-1 Land Use Diagram.* July 2014.
[71] City of Hayward. "City of Hayward Zoning." August 22, 2019. Accessed July 19, 2023. https://opendata.hayward-ca.gov/documents/Hayward::hayward-zoning-pdf-map-42x70-190627/explore.

4.11.2 Impact Discussion

For the purpose of determining the significance of the project's impact on land use and planning, would the project:

1) Physically divide an established community?
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

4.11.2.1 *Project Impacts*

a) Would the project physically divide an established community?

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project site is located in an industrial area surrounded by industrial development and commercial uses. It would not include any physical features that would physically divide the community (e.g., blocking roadways or sidewalks) and would not interfere with the movement of residents through a neighborhood. For these reasons, construction of the proposed project would not divide an established community. **(No Impact)**

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?

Consistency with General Plan and Municipal Code

The Industrial Technology and Innovation Corridor (IC) land use designation for the site allows for professional offices, corporate campuses, research and development, warehousing and logistics, manufacturing, and biotechnology uses with a maximum floor area ratio (FAR) of 0.8. The project complies with the requirements and policies of the IC land use designation and the proposed data center campus is an allowed use within the IC designation. The project includes 333,560 square feet of floor area on an 11.3 acre project site, resulting in a FAR of 0.7, which is below the maximum allowed FAR of 0.8. The project also complies with the applicable land use policies from the General Plan identified above, as summarized in Table 4.11-1 below.

Table 4.11-1: Hayward General Plan Policy Land Use Compliance

Policy Number	Policy	Project Complies?
LU-6.2	Industrial and Warehouse Conversions. The City shall encourage the conversion of obsolete industrial and warehouse distribution space to a productive use, such as advanced manufacturing, professional office centers, corporate campuses, research and development parks, and flex space.	Yes. The project would demolish an obsolete development to allow construction of a productive industrial project.
LU-6.3	Parcel Consolidation. The City shall promote the consolidation of small and irregular shaped parcels within the industrial Technology and Innovation Corridor to improve the economic feasibility of development projects.	Yes. The project would consolidate existing irregular parcels and improve feasibility of redevelopment.
LU-6.7	Design Strategies. The City shall encourage developments within the Industrial Technology and Innovation Corridors 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 façade treatments on all sides of building. • 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 and connect building entrances to sidewalks.	Yes. The project complies with the design strategies by incorporating on-site landscaping and trees (landscaped buffers), screening roof-top equipment and industrial operations, having consistent architectural façade treatments, accommodating the turning movements of large trucks, providing signage for tenant identification and way-finding, including lighting to prevent dark pockets on-site, and incorporating sidewalks.

	Use landscaped buffers with trees and attractive sound walls to screen adjacent residential areas and other sensitive uses.	
LU-6.8	Employee Amenities. The City shall encourage the provision of employee-serving amenities for major employment uses within the Industrial Technology and Innovation Corridor, such as courtyards and plazas, outdoor seating areas, fitness facilities, bicycle storage areas, and showers.	Yes. As part of applying for a Major Site Plan Review for a building height increase, STACK will propose a public benefits and amenities package.

The Industrial Park (IP) zoning district is intended for high technology, research and development, and industrial activities in an industrial park or campus-like atmosphere buildings. The project complies with the requirements of the IP zoning district and the proposed data center campus is an allowed use under the IP zoning district, which specifically permits "data processing centers" and "computer, technical, or informational services" among other similar industrial, manufacturing, and technology uses.

The project proposes a maximum building height of 116.5 feet, which exceeds the default maximum height of 75 feet in the IP zoning district. However, the City is authorized to approve a height increase above 75 feet, subject to Major Site Plan Review approval and the project providing public benefits and amenities. As part of this project, STACK is applying for a Major Site Plan Review for a building height increase, and proposing a public benefits and amenities package to support the required height increase. By undergoing Major Site Plan Review for the increased building height, during which the project will be required to provide public benefits and amenities, and during which the City may impose conditions of approval or other requirements to guarantee land use compatibility, the project would not conflict with the City's zoning code. **(Less than Significant Impact)**

Consistency with the Airport Land Use Compatibility Plan

The Hayward Executive Airport is located approximately 1.75-miles northeast of the project site. The project site is located within the AIA for the Airport but is not located within any safety zones or noise contours.[72] Refer to Section 4.9 Hazards and Hazardous Materials for a discussion of project impacts related to airport hazards, including safety and noise exposure. As described in Section 4.9 Hazards and Hazardous Materials, pursuant to CLUP policy and Federal Aviation Administration (FAA) regulations, the project would be required to notify the FAA of the project and obtain an issuance of Determination of No Hazard prior to project approval. Because the project is required to comply with applicable FAA procedures, the proposed project would have a less than significant impact on airport operations and would not conflict with the CLUP. **(Less than Significant Impact)**

[72] Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-1 Airport Influence Area.

Impact Conclusion

For the reasons described above, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

4.11.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant land use and planning impact?

The proposed project would not include any infrastructure that could potentially divide an established community, such as roadways, bridges, or open spaces. Development of the project would be confined to the site and would be consistent with the General Plan and Zoning Ordinance. The project would not conflict with any other land use plans, policies, or regulations adopted to reduce or avoid environmental impacts.

Other projects in the City would be required to go through the City's development review process. Projects would be analyzed for conformance with applicable policies adopted for the purpose of avoiding or mitigating an environmental impact through the CEQA review process. The project, in combination with other cumulative development, would not result in a significant cumulative land use impact. **(Less than Significant Cumulative Impact)**

4.12 Mineral Resources

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

Local

Hayward 2040 General Plan

The Hayward 2040 General Plan (General Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to mineral resources and are applicable to the proposed project.

Policies	Description
NR-5.1	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.

4.12.1.2 *Existing Conditions*

According to the General Plan, 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, approximately 3.6 miles east of the project site and ceased operation prior to 2008 due to depletion of the accessible aggregate resource.[73] The La Vista Quarry has since been redeveloped with residential and parkland uses.

[73] City of Hayward. *Hayward 2040 General Plan Background Report.* January 2014. Page 7-109.

4.12.2 Impact Discussion

For the purpose of determining the significance of the project's impact on mineral resources, would the project:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
2) 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?

4.12.2.1 *Project 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 residents of the state?

The site is currently developed as the Eden Landing Business Park and consists of nine commercial and industrial one-story buildings in a business park setting. No mining operations currently occur or have occurred on-site. The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

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?

The only designated mineral resource recovery site identified within the City of Hayward was the La Vista Quarry, approximately 3.6 miles east of the project site, which ceased operations prior to 2008 due to depletion of the accessible aggregate resource. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **(No Impact)**

4.12.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant mineral resources impact?

As discussed above, the proposed project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Therefore, the proposed project in combination with other projects would not contribute to a significant cumulative mineral resource impact. **(No Cumulative Impact)**

4.13 Noise

The following discussion is based, in part, on an Environmental Noise and Vibration Assessment prepared for the project by Bollard Acoustical Consultants, Inc. in September 2023. This report is included as Appendix G to this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[74] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[74] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration (vibration decimal [VdB]) are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: FTA Groundborne Vibration Impact Criteria (VdB)

Land Use Category	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

The FTA also has criteria for assessing vibration damage to structures as shown in Table 4.13-2.

Table 4.13-2: FTA Criteria For Assessing Vibration Damage to Structures (VdB)

Building Category	Level
I. Reinforce- concrete, steel, or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90

State and Local

California Green Building Standards Code

For commercial uses, CalGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

Hayward 2040 General Plan

The Hayward 2040 General Plan (General Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to noise and are applicable to the proposed project.

Policy	Description
HAZ-8.1	Locating Noise Sensitive Uses. The City shall strive to locate noise sensitive uses, (e.g., residences, schools, hospitals, libraries, religious institutions, and convalescent homes) away from major sources of noise.
HAZ-8.2	Noise Study and Mitigation. The City shall require development projects in areas where they may be exposed to major noise sources (e.g., roadways, rail lines, and aircraft or other non-transportation noise sources) to conduct a project level environmental noise analysis. The noise analysis shall determine noise exposure and noise standard compatibility with respect to the noise standards identified in Table HAZ-1 and shall incorporate noise mitigation when located in noise environments that are not compatible with the proposed uses of the project. The City shall use Table HAZ-1 (Exterior Noise Standards for Various Land Uses) and Figure HAZ-1 (Future Noise Contour Maps) to determine potential noise exposure impacts, noise compatibility thresholds, and the need for mitigation. The City shall determine mitigation measures based on project-specific noise studies, and may include sound barriers, building setbacks, the use of closed windows and the installation of heating and air conditioning ventilation systems, and the installation of noise attenuating windows and wall/ceiling insulation.
HAZ-8.3	Incremental Noise Impacts of Commercial and Industrial Development. The City shall consider the potential noise impacts of commercial and industrial developments that are located near residences and shall require noise mitigation measures as a condition of project approval.
HAZ-8.4	Noise Mitigation and Urban Design. The City shall consider the visual impact of noise mitigation measures and shall require solutions that do not conflict with urban design goals and standards.
HAZ-8.14	Airport Noise. The City shall monitor noise impacts from aircraft operations at the Hayward Executive Airport and maintain and implement the noise abatement policies and procedures outlined in the Airport Noise Ordinance and Land Use Compatibility Plan.
HAZ-8.15	Airport Noise Evaluation and Mitigation. The City shall require project applicants to evaluate potential airport noise impacts if the project is located within the 60 dB CNEL contour line of the Hayward Executive Airport or Oakland International Airport (as mapped in the Land Use Compatibility Plan). All projects shall be required to mitigate impacts to comply with the interior and exterior noise standards established by the Land Use Compatibility Plan.
HAZ-8.20	Construction Noise Study. The City may require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.
HAZ-8.21	Construction and Maintenance Noise Limits. The City shall limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00 am to 7:00 pm Monday through Saturday and 10:00 am to 6:00 pm on Sundays and holidays).
HAZ-8.22	Vibration Impact Assessment. The City shall require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.

The City's General Plan also includes noise compatibility standards for various land uses under Table HAZ-1 in the General Plan. The City's exterior noise standards are shown in Table 4.13-3

Table 4.13-3: Hayward General Plan Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	Highest Level of Exterior Noise Exposure that is "Normally Acceptable,"[a] DNL[b] or CNEL[c] (dB)
Residential: Single-Family Homes, Duplex, Mobile Home	60
Residential: Townhomes and Multi-Family Apartments	65
Urban Residential Infill[d] & Mixed-Use Development	70
Lodging: Motels and Hotels	65
Schools, Libraries, Churches, Hospitals, Nursing Homes	70
Auditoriums, Concert Halls, 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	75
Office Buildings: Business, Commercial, Professional	70
Industrial Manufacturing, Utilities, Agriculture	75

[a.] As defined in the State of California General Plan Guidelines 200, "Normally Acceptable" means that the specified land uses is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise mitigation. For projects located along major transportation corridors (major freeways, arterials, and rail lines) this "normally acceptable" exterior noise level may be exceeded for certain areas of the project site (e.g. the frontage adjacent to the corridor or parking areas) with the exception of primary open space areas (see policies HAZ-8.5 and HAZ-8.6).

[b.] Ldn or Day Night Average is an average 24-hour noise measurement that factors day and night noise levels.

[c.] CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.

[d.] Urban residential infill would include all types of residential development within existing or planned urban areas (such as Downtown, The Cannery Neighborhood, and the South Hayward BART Urban Neighborhood) and along major corridors (such as Mission Boulevard).

[e.] Mixed-Use Projects would include all mixed-use developments throughout the City of Hayward.

Source: City of Hayward. *Hayward 2040 General Plan Policy Document*. July 2014. Table HAZ-1

City of Hayward Municipal Code

The City's Municipal Code contains a Noise Ordinance that limits noise levels during construction activities and at adjacent properties. Section 4-1.03.1 of the Municipal Code outlines noise limits for residential, commercial, and industrial uses and Section 4-1.03.4 outlines construction noise limits. The applicable Municipal Code sections are presented below.

Section 4-1.03.1 Noise Restriction by Decibel

(a) Residential Property Noise Limits.

1. No person shall produce or allow to be produced by human voice, machine, device, or any combination of same, on residential property, a noise level at any point outside of the property plane that exceeds 70 dBA between the hours of 7:00 a.m. and 9:00 p.m. or 60 dBA between the hours of 9:00 p.m. and 7:00 a.m.

2. No person shall produce or allow to be produced by human voice, machine, device, or any combinations of same, on multifamily residential property, a noise level more than 60 dBA three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, when windows and doors of the dwelling unit are closed, except within the dwelling unit in which the noise source or sources may be located.

(b) Commercial and Industrial Property Noise Limits. Except for commercial and industrial property abutting residential property, no person shall produce or allow to be produced by human voice, machine, device, or any other combination of same, on commercial or industrial property, a noise level at any point outside of the property plane that exceeds 70 dBA. Commercial and industrial property that abuts residential property shall be subject to the residential property noise limits set forth in sections (a)(1) and (2) above.

Section 4-1.03.4 Construction and Alteration of Structures; Landscaping Activities

Unless otherwise provided pursuant to a duly issued permit or a condition of approval of a land use entitlement, the construction, alteration, or repair of structures and any landscaping activities, occurring between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays, and 7:00 a.m. and 7:00 p.m. on other days, shall be subject to the following:

(a) No individual device or piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to 25 feet from the equipment.

(b) The noise level at any point outside the property plane shall not exceed 86 dBA.

(c) During all other times, the decibel levels set forth in Section 4-1.03.1 shall control.

4.13.1.3 *Existing Conditions*

Existing Noise-Sensitive Receptors

The nearest noise sensitive receptors to the project site are the single-family residences in a single-family neighborhood approximately 2,900 feet east of the project site east of Industrial Boulevard

at 2796 Cook Place. The industrial uses adjacent to the project site are not considered noise-sensitive land uses but noise-generating uses.

Existing Noise Environment

The existing noise environment in the project area is primarily due to vehicular traffic along State Route 92 (SR 92) to the north and industrial activities adjacent to the project site. To calculate the existing ambient noise levels, a noise monitoring survey consisting of two long-term (LT-1 and LT-2) and four short-term (ST-1, ST-2, ST-3, and ST-4) noise measurements was completed at the site and the surrounding area between August 10 through August 13, 2023. All measurement locations are shown in Figure 4.13-1.

Long-Term Ambient Noise Survey

Noise level measurements obtained at Site LT-1 are believed to be representative of the existing ambient noise level environment within the project vicinity, including adjacent industrial uses. Site LT-2 was specifically selected to be representative of the existing ambient noise level environment at the closest noise-sensitive uses to the project (single-family residence adjacent to Industrial Boulevard. Table 4.13-4 lists the long-term noise measurement results.

Table 4.13-4: Long-Term Noise Measurements (dB)

Noise Measurement Location	Date	DNL	Daytime Average L_{eq}	Daytime Average L_{max}	Nighttime Average L_{eq}	Nighttime Average L_{max}
LT-1: Southern end of project parcel	8/10/2023	64	63	75	55	72
	8/11/2023	63	59	75	56	73
	8/12/2023	60	58	71	53	69
	8/13/2023	59	57	70	52	67
LT-2: Adjacent to the residence at 2796 Cook Place	8/10/2023	74	71	86	66	82
	8/11/2023	74	72	91	67	83
	8/12/2023	71	69	86	64	79
	8/13/2023	70	67	82	62	81

LT = long-term; L_{eq} = The average A-weighted noise level during the measurement period; L_{max} = maximum A-weighted noise level during the measurement period

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Source: Bollard Acoustical Consultants.

NOISE AND VIBRATION SURVEY LOCATIONS | FIGURE 4.13-1

As shown in Table 4.13-4, measured day-night average levels (DNL) and average measured hourly noise levels (L_{eq} and L_{max}) were generally consistent at each individual site throughout the monitoring period. The noise levels near the residence at 2796 Cook Place are higher because this location is exposed to vehicle noise from SR 92 and Industrial Boulevard. The Southern Pacific Railroad, which is approximately 865 feet west of the residence, is another noise source that contributes to the higher ambient noise levels. The ambient noise levels in proximity to the residence are also included for the operational activities at the industrial buildings located approximately 885 feet west of the residence.

Short-Term Ambient Noise Survey

The short-term (15 minutes) noise survey was conducted on August 9th, 2023 at four locations The short-term noise measurement sites were specifically selected to be representative of the existing ambient noise level environment at adjacent industrial uses during daytime hours. Table 4.13-5 lists the short-term noise measurements.

Table 4.13-5: Short-Term Noise Measurements (dB)

Noise Measurement Location	Time	Average, L_{eq}	Maximum, L_{max}
ST-1: Northwest end of project site	12:04 pm	65	81
ST-2: East end of project site	12:26 pm	59	77
ST-3: Southeast end of project site	12:47 pm	57	78
ST-4: West end of project site	1:10 PM	57	65

ST = short-term; L_{eq} = The average A-weighted noise level during the measurement period; L_{max} = maximum A-weighted noise level during the measurement period

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

As shown in Table 4.13-5, the measured ambient noise levels were highest at Site ST-1. The elevated measured levels at site ST-1 were primarily attributed to traffic on SR 92 to the north, heavy truck passbys, and operations/activities at existing industrial uses.

Existing Vibration Environment

The existing vibration sources in the project's vicinity are primarily attributed to heavy truck passbys on adjacent roadways. Short-term (15-minutes) vibration measurements were taken at four locations on August 9, 2023.Table 4.13-6 lists the short-term vibration measurements.

Table 4.13-6: Short-Term Vibration Measurements (VdB)

Noise Measurement Location	Time	Maximum Vibration Level
ST-1: Northwest end of project site	12:04 pm	76
ST-2: East end of project site	12:26 pm	75
ST-3: Southeast end of project site	12:48 pm	75
ST-4: West end of project site	1:11 PM	69

ST = short-term; VdB = vibration decibels

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

As shown in Table 4.13-6, the maximum vibration levels ranged from 69 vibration decibels (VdB) to 76 VdB.

4.13.2 Impact Discussion

For the purpose of determining the significance of the project's impact on noise, would the project result in:

1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
2) Generation of excessive groundborne vibration or groundborne noise levels?
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.13.2.1 *Project 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

Construction activities generate considerable amounts of noise, especially during earth moving activities when heavy equipment is used. Construction of the project would involve demolition of the existing structures and pavement, site preparation, grading and excavation, trenching, installation of underground telecommunication lines in the streets adjacent to the project site,

building construction, and paving which would temporarily increase noise levels in the immediate vicinity of the site for a 22 month construction period.

The City of Hayward does not establish noise level thresholds for construction activities; therefore, this analysis assumes a significant impact could occur if noise levels increase by five dB or more over existing ambient noise levels at the nearest noise-sensitive uses (e.g., residential, which in this case is 2,900 feet to the east). Reference noise levels for typical construction equipment at 50 feet is provided in Table 4.13-7. Note that the project may not utilize all the equipment listed in Table 4.13-7.

Table 4.13-7: Reference Noise Levels from Typical Construction Equipment (dB)

Equipment	Noise Level at 50 feet, L_{max}
Air compressor	80
Backhoe	80
Ballast Equalizer	82
Ballast tamper	83
Compactor	82
Concrete mixer	85
Concrete Pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85
Excavator	85
Generator	82
Grader	85
Impact wrench	85
Loader	80
Paver	85
Pneumatic Tool	85
Pump	77
Saw	76
Scarifier	83
Scraper	85
Shovel	82
Spike driver	77
Tie cutter	84

Tie handler	80
Tie inserter	85
Truck	84

L_{max} = maximum A-weighted noise level during the measurement period

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

As shown in Table 4.13-7, noise levels from typical construction equipment that would be used onsite would range from 76 dB L_{max} to 85 dB L_{mac} at 50 feet and this range would increase to 82 dB L_{max} to 91 dB L_{max} at 25 feet. At the nearest residential use, approximately 2,900 feet east of the project site, the on-site construction noise levels would range from 41 dB L_{max} to 50 dB L_{max} with the average maximum noise level being 45 dB L_{max}. The off-site installation of telecommunication lines in the street adjacent to the project site would have construction noise levels ranging from 41 dB L_{max} to 51 dB L_{max} with the average maximum noise level being 46 dB L_{max} at 2,800 feet.[75]

Based on the reference construction equipment noise levels at the nearest residence, the calculated increase in ambient daytime maximum noise levels would be less than 0.1 dB L_{max}. The calculated increase in daytime ambient noise levels due to construction would not exceed the threshold of increasing noise levels by five dB or more. However, based on the reference sound level data for typical construction equipment provided in Table 4.13-7, on-site project demolition/construction equipment could potentially exceed the noise level limits identified in Municipal Code Section 4-1.03.4(a) and/or 4-1.03.4(b).

In accordance with the recommendations of the project-specific Environmental Noise and Vibration Report, the following applicant-proposed project measures will be implemented by the project to reduce construction related noise level impacts:

Impact NOI-1: Project construction equipment may exceed the noise level limits identified in Municipal Code Section 4-1.03.4(a) and/or 4-1.03.4(b).

Applicant Proposed Project Measure:

PD NOI-1.1: Construction Noise Best Practices. To ensure compliance with the construction-related noise criteria contained in Hayward Municipal Code Section 4-1.03.4, and to reduce the potential for annoyance at nearby land uses, the following measures would be incorporated into project on-site demolition/construction operations:

[75] The telecommunication construction work would be closer to residential uses by 100 feet compared to construction activities on the project site.

- All project construction activities shall occur between 7:00 AM and 7:00 PM Monday through Friday pursuant to the hours and days specified in the Hayward General Plan Policy HAZ-8.21.
- All project construction equipment/devices shall operate in compliance with the Hayward Municipal Code Section 4-1.03.4(a) and 4-1.03.4(b).
    - Municipal Code Section 4-1.03.4(a): No individual device or piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to 25 feet from the equipment.
    - Municipal Code Section 4-1.03.4(b): The noise level at any point outside of the property plane shall not exceed 86 dBA.
- 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 while in the course of project activity.
- 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.

Implementation of these applicant-proposed project measures would reduce construction-related noise level impacts by requiring construction occur during allowable hours and equipment be equipped with noise reducing features, and not locating construction staging areas near sensitive land uses. Therefore, project construction would not result in a generation of a substantial temporary increase in ambient noise levels at the closest existing noise-sensitive uses (residential) to the project site. **(Less than Significant Impact)**

Operation

The project would generate operational noise from the following sources: rooftop mechanical equipment (which includes heating, ventilation, and air conditioning [HVAC] and exhaust fans) and emergency generators.

Rooftop Mechanical Equipment Noise Levels

The SVY03ADC1 building rooftop would have approximately 26 HVAC condenser units and 152 upblast exhaust fans. The SVY03AD2 building rooftop would have nine HVAC condenser units with six fans per unit and two upblast exhaust fans. The SoundPLAN Version 8.2 noise prediction model was utilized to project mechanical equipment (condensers and exhaust fans) noise levels from proposed rooftop locations. The model assumed that the proposed condensers and exhaust fans would operate concurrently for a 24-hour period. In addition, the model assumed a noise reduction on the SVY03DA1 rooftop because the project proposes a seven foot parapet along the perimeter of the SVY03DA1 building rooftop.

The results from the SoundPLAN model at the nearest industrial and residential uses and project property lines are summarized in Table 4.13-8, Table 4.13-9, Table 4.13-10, and Table 4.13-11. Noise contours for the rooftop mechanical equipment and receiver locations are shown in Figure 4.13-2, Figure 4.13-3, Figure 4.13-4, Figure 4.13-5. The results compare the calculated noise levels from the project's HVAC condenser units and exhaust fans compared to the General Plan DNL standard and the Municipal Code L_{max} standard. The General Plan DNL standards applicable to this project are the 75 DNL standard for industrial uses and the 60 DNL standard for residential uses. The Municipal Code L_{max} standard is 70 dB L_{max}.

Table 4.13-8: Project HVAC Condenser Unit Noise Levels Compared to General Plan DNL Standard

Receiver[1]	Land use	Equipment Noise Level, DNL (dB)[2,3]	General Plan Noise Standard, DNL (dB)[4]
R1	Industrial	55	75
R2	Industrial	41	75
R3	Industrial	39	75
R4	Industrial	44	75
R5	Industrial	51	75
R6	Industrial	60	75
R7	Industrial	57	75
R8	Industrial	61	75
R9	Residential	28	60

[1] Receiver locations are shown in Figure 4.13-2.

[2] Predicted DNL noise levels reflect all proposed rooftop condensers at SVY03AD1 and SVY03AD2 buildings in operation continuously and concurrently.

[3] Predicted equipment noise levels with attenuation from seven rooftop parapet shielding at SVY03AD1 building.

[4] General Plan DNL standards applicable to industrial and single-family residential uses.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Table 4.13-9: Project HVAC Condenser Unit Noise Levels Compared to Municipal Code L_{max} Standard

Project Property Line[1]	Equipment Noise Level, L_{max} (dB)	Municipal Code Noise Standard, L_{max} (dB)
North	48	70
East	33	70
South	51	70
West	54	70

[1] Project property line shown in Figure 4.13-3.

[2] Predicted maximum levels from condensers at SVY03AD1 and SVY03AD2 buildings at project property lines.

[3] Predicted equipment noise levels with attenuation from seven rooftop parapet shielding at SVY03AD1 building.

[4] Municipal Code industrial use maximum noise standard applied at project property line.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Table 4.13-10: Project Exhaust Fan Noise Levels Compared to General Plan DNL Standard

Receiver[1]	Land use	Equipment Noise Level, DNL (dB)[2,3]	General Plan Noise Standard, DNL (dB)[4]
R1	Industrial	58	75
R2	Industrial	56	75
R3	Industrial	53	75
R4	Industrial	52	75
R5	Industrial	54	75
R6	Industrial	57	75
R7	Industrial	59	75
R8	Industrial	61	75
R9	Residential	48	60

[1] Receiver locations are shown in Figure 4.13-4.

[2] Predicted DNL noise levels reflect all proposed rooftop condensers at SVY03AD1 and SVY03AD2 buildings in operation continuously and concurrently.

[3] Predicted equipment noise levels with attenuation from seven rooftop parapet shielding at SVY03AD1 building.

[4] General Plan DNL standards applicable to industrial and single-family residential uses.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Table 4.13-11: Project Exhaust Fan Noise Levels Compared to Municipal Code L_{max} Standard

Project Property Line[1]	Equipment Noise Level, L_{max} (dB)	Municipal Code Noise Standard, L_{max} (dB)
North	52	70
East	48	70
South	46	70
West	55	70

[1] Project property line shown in Figure 4.13-5.

[2] Predicted maximum levels from condensers at SVY03AD1 and SVY03AD2 buildings at project property lines.

[3] Predicted equipment noise levels with attenuation from seven rooftop parapet shielding at SVY03AD1 building.

[4] Municipal Code industrial use maximum noise standard applied at project property line.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Source: Bollard Acoustical Consultants.

DNL CONTOURS FOR THE HVAC CONDENSING UNITS

FIGURE 4.13-2

Source: Bollard Acoustical Consultants.

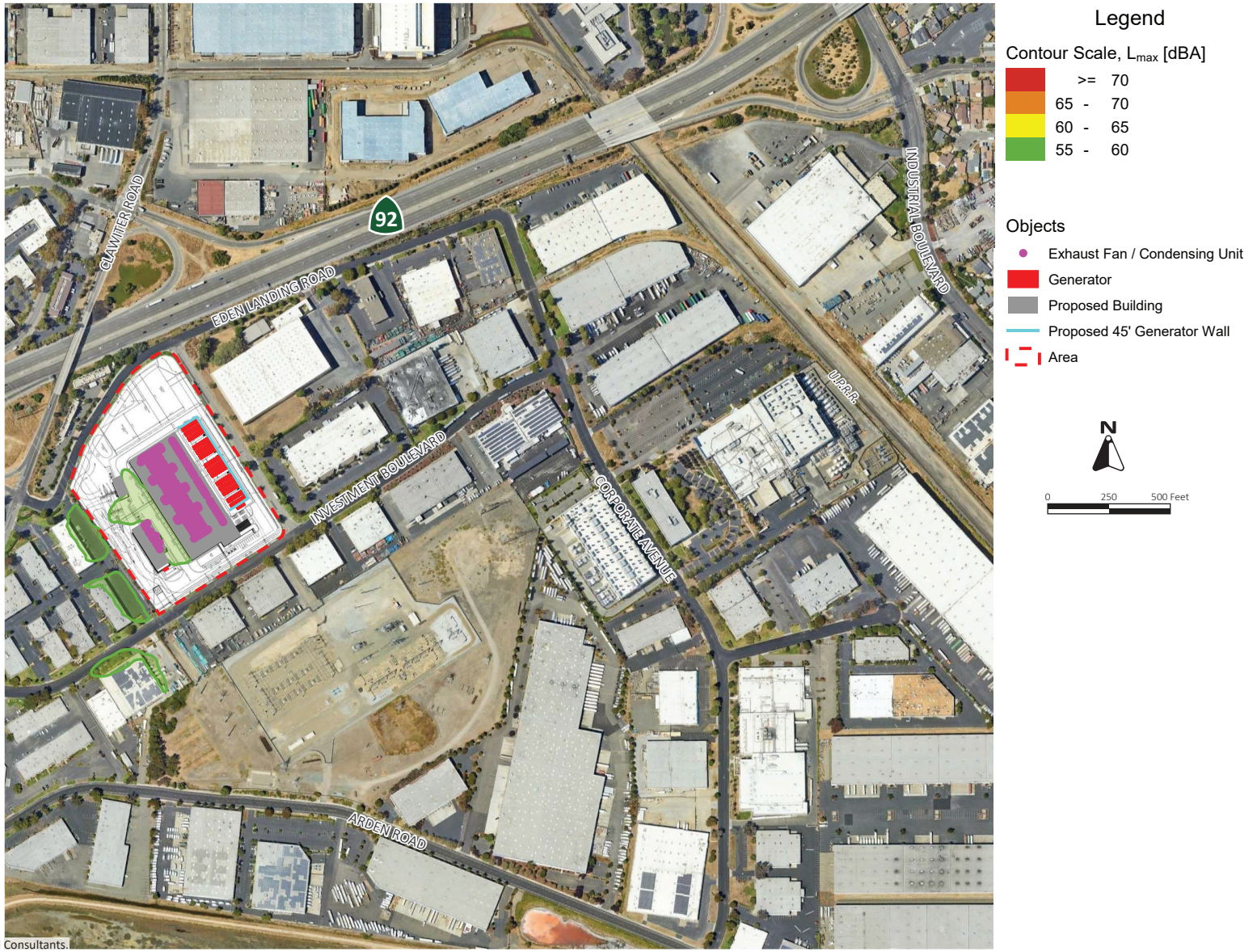
L_{MAX} CONTOURS FOR THE HVAC CONDENSING UNITS

FIGURE 4.13-3

Source: Bollard Acoustical Consultants.

DNL CONTOURS FOR THE EXHAUST FANS

FIGURE 4.13-4



Source: Bollard Acoustical Consultants.

L_{MAX} CONTOURS FOR THE EXHAUST FANS

FIGURE 4.13-5

As shown in Table 4.13-8 and Table 4.13-10, the project's rooftop mechanical equipment would comply with the applicable General Plan noise level standards for industrial and residential uses. The rooftop mechanical equipment would also not exceed the City's industrial maximum noise level limit of 70 dB L_{max} at the project property lines as shown in Table 4.13-9 and Table 4.13-11. The project would increase the ambient day-night average noise levels at the closest residential use by 0.1 dB DNL. The calculated increase in daytime ambient noise levels due to the project's rooftop mechanical equipment would not exceed the threshold of increasing noise levels by five dB or more. The proposed rooftop mechanical equipment would not exceed the applicable General Plan or Municipal Code noise level thresholds at the closest industrial or residential uses. As a result, project noise due to rooftop mechanical equipment would not result in a measurable or detectable increase over existing ambient noise levels at the nearest residences. Therefore, the project would not have a significant permanent noise impact related to rooftop mechanical equipment. **(Less than Significant Impact)**

Emergency Generators Noise Levels

The SVY03ADC1 building rooftop would include 27 emergency generators within a ground level outdoor generator yard on the east side of the SVY03ADC1 building. Of the 27 emergency generators, 24 of the emergency generators would be stacked two-high and three generators would be unstacked. The SVY03AD2 building rooftop would have one emergency generator within a ground level outdoor generator yard on the south side of the SVY03ADC2 building. The testing schedule for the emergency generators is shown in Table 4.13-12. The SoundPLAN model was utilized to project emergency generator noise levels from proposed on-site locations. The modeling assumed some noise shielding or reduction because of the intervening topography and structures. The generators will be housed inside an enclosure which will attenuate sound to a reference sound level of 75 dB at a distance of 23 feet.

Table 4.13-12: Proposed Emergency Generator Testing Schedule

Testing Scenario	Frequency	Maximum Duration (minutes)	Number of Engines Run Concurrently	Number of Generators Testing per Day	Load Range
Readiness Testing	Monthly	30	1	10	40%
Generator Maintenance & Testing	Annual	60	1	8	25% for 30 minutes 50% for 30 minutes 100% for 1 hour

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

The predicted DNL and L_{max} noise levels are shown in Table 4.13-13 and Table 4.13-14, respectively. The noise contours for the emergency generators and receiver locations are shown in Figure 4.13-6 and Figure 4.13-7.

Table 4.13-13: Project Emergency Generator Noise Levels Compared to General Plan DNL Standard

Receiver[1]	Land use	Equipment Noise Level, DNL (dB)[2]	General Plan Noise Standard, DNL (dB)[3]
R1	Industrial	46	75
R2	Industrial	70	75
R3	Industrial	76	75
R4	Industrial	65	75
R5	Industrial	61	75
R6	Industrial	59	75
R7	Industrial	57	75
R8	Industrial	47	75
R9	Residential	44	60

[1] Receiver locations are shown in Figure 4.13-6.

[2] Predicted DNL noise levels reflect the operation of 1 generator at a time for the duration of 8 hours during daytime hours, with up to 8 generators tested per day (i.e., up to 8 consecutive hours of generator testing in one day).

[3] General Plan DNL standards applicable to industrial and single-family residential uses.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Table 4.13-14: Project Emergency Generator Noise Levels Compared to Municipal Code L_{max} Standard

Project Property Line[1]	Equipment Noise Level, L_{max} (dB)[2]	Municipal Code Noise Standard, L_{max} (dB)[3]
North	40	70
East	65	70
South	64	70
West	65	70

[1] Project property line shown in Figure 4.13-7.

[2] Predicted maximum noise levels from closest generators at SVY03AD1 and SVY03AD2 building generator yards.

[3] Municipal Code industrial use maximum noise standard applied at project property line.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Legend

Contour Scale, DNL [dBA]

>=	70
65 -	70
60 -	65
55 -	60

Objects

- Receiver
- Exhaust Fan / Condensing Unit
- Generator
- Proposed Building

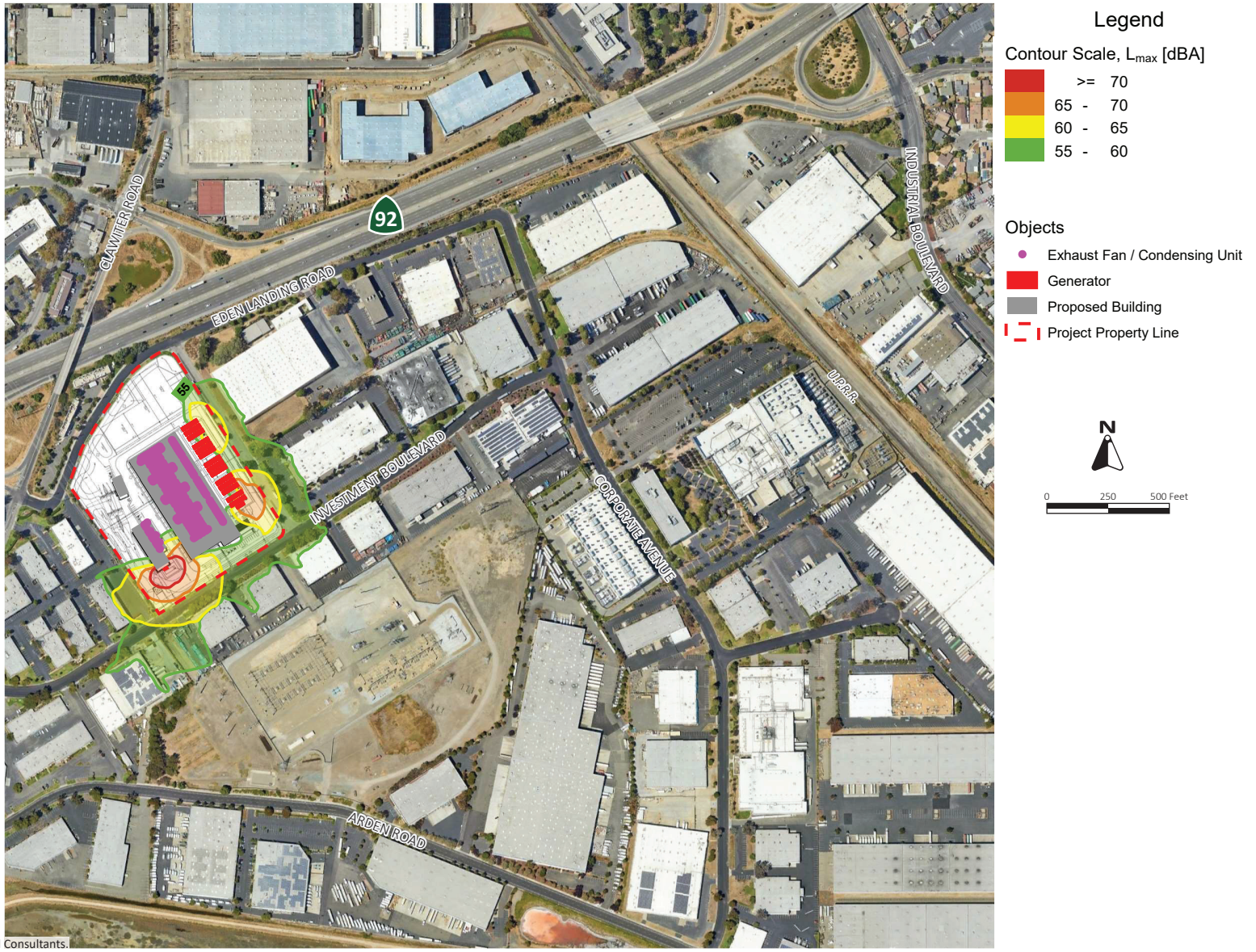
N

0 250 500 Feet

Source: Bollard Acoustical Consultants.

DNL CONTOURS FOR THE EMERGENCY GENERATORS

FIGURE 4.13-6



Source: Bollard Acoustical Consultants.

L_{MAX} CONTOURS FOR THE EMERGENCY GENERATORS

FIGURE 4.13-7

As shown in Table 4.13-13, the project's emergency generators noise levels would comply with the applicable General Plan noise level standards for industrial and residential uses. The emergency generators would also not exceed the City's industrial maximum noise level limit of 70 dB L_{max} at the project property lines as shown in Table 4.13-14. The project would increase the ambient day-night average noise levels at the closest residential use by 0.1 dB DNL. The calculated increase in daytime ambient noise levels due to the project's emergency generators would not exceed the threshold of increasing noise levels by five dB or more. The proposed rooftop mechanical equipment would not exceed the applicable General Plan or Municipal Code noise level thresholds at the closest industrial or residential uses. As a result, project noise due to emergency generators would not result in a measurable or detectable increase over existing ambient noise levels at the nearest residences. Therefore, the project would not have a significant permanent noise impact related to rooftop mechanical equipment. **(Less than Significant Impact)**

Cumulative Operational Noise Levels

The cumulative noise levels from the rooftop mechanical equipment and the emergency generators were also computed in the SoundPLAN model. The combined cumulative noise levels from all the operational noise sources are shown in Table 4.13-15 and Table 4.13-16 with the former table showing the DNL noise levels and the latter table showing the L_{max} noise levels. The cumulative noise level contours and receiver locations are shown in Figure 4.13-8 and Figure 4.13-9.

Table 4.13-15: Project Cumulative Noise Levels Compared to General Plan DNL Standard

Receiver[1]	Land use	Cumulative Noise Level, DNL (dB)[2]	General Plan Noise Standard, DNL (dB)[3]
R1	Industrial	60	75
R2	Industrial	59	75
R3	Industrial	59	75
R4	Industrial	57	75
R5	Industrial	59	75
R6	Industrial	64	75
R7	Industrial	63	75
R8	Industrial	64	75
R9	Residential	48	60

[1] Receiver locations are shown in Figure 4.13-8.

[2] Predicted DNL noise levels reflect the operation of 1 generator at a time for the duration of 8 hours during daytime hours, with up to 8 generators tested per day (i.e., up to 8 consecutive hours of generator testing in one day).

[3] General Plan DNL standards applicable to industrial and single-family residential uses.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

Table 4.13-16: Project Cumulative Noise Levels Compared to Municipal Code L_{max} Standard

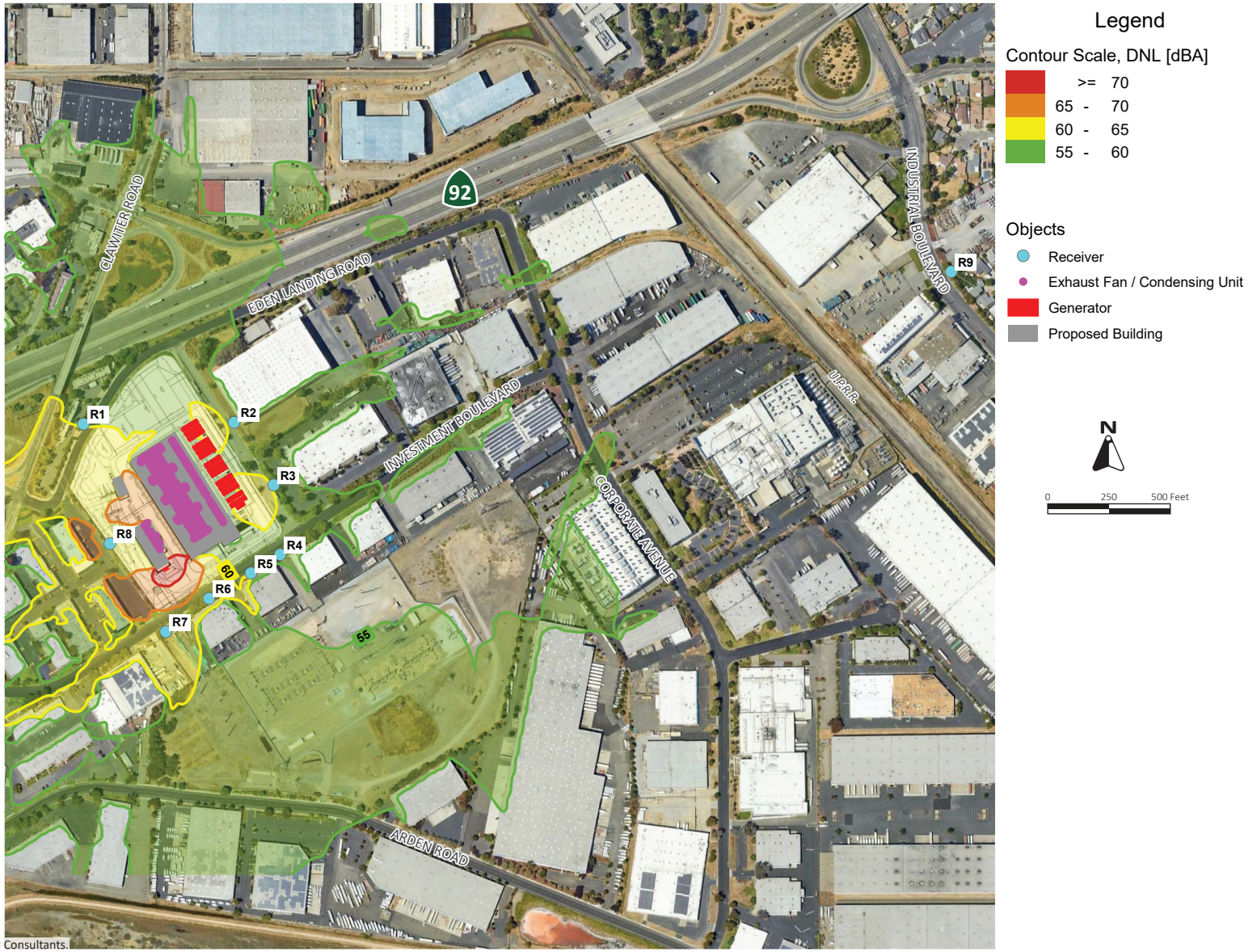
Project Property Line[1]	Cumulative Noise Level, L_{max} (dB)	Municipal Code Noise Standard, L_{max} (dB)[2]
North	53	70
East	65	70
South	65	70
West	66	70

[1] Project property line shown in Figure 4.13-9.

[2] Municipal Code industrial use maximum noise standard applied at project property line.

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

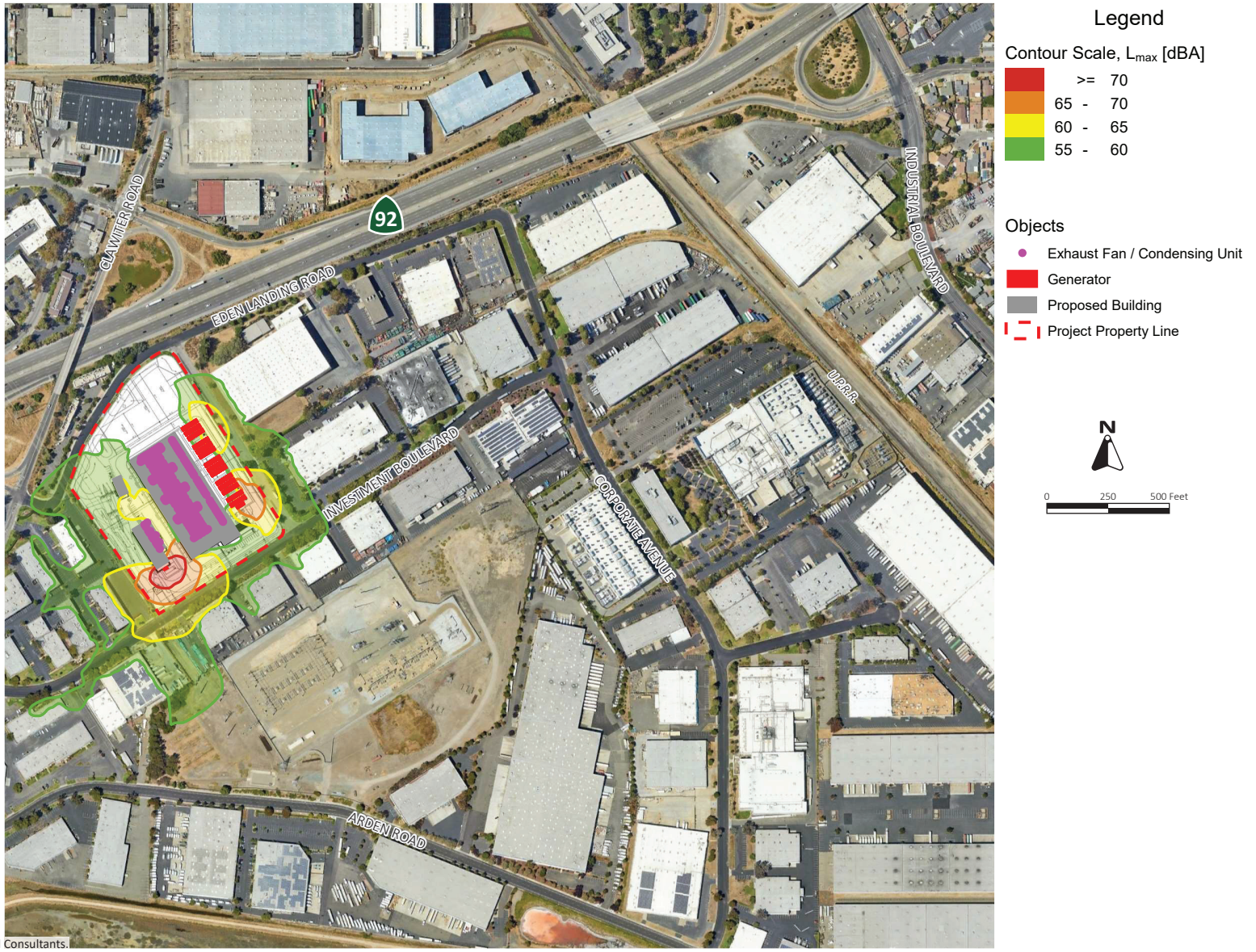
As shown in Table 4.13-15, the project's cumulative noise levels would comply with the applicable General Plan noise level standards for industrial and residential uses. The project's cumulative noise levels would also not exceed the City's industrial maximum noise level limit of 70 dB L_{max} at the project property lines as shown in Table 4.13-16. The project would increase the ambient day-night average noise levels at the closest residential use by 0.1 dB DNL. The calculated increase in daytime ambient noise levels due to the project's emergency generators would not exceed the threshold of increasing noise levels by five dB or more. The cumulative noise levels generated by project operation would not exceed the applicable General Plan or Municipal Code noise level thresholds at the closest industrial or residential uses. As a result, project noise due to emergency generators would not result in a measurable or detectable increase over existing ambient noise levels at the nearest residences. Therefore, the project would not have a significant permanent noise impact related to the cumulative operation of the rooftop mechanical equipment or emergency generators. **(Less than Significant Impact)**



Source: Bollard Acoustical Consultants.

DNL CONTOURS FOR THE CUMULATIVE NOISE SOURCES

FIGURE 4.13-8



Source: Bollard Acoustical Consultants.

L_{MAX} CONTOURS FOR THE CUMULATIVE NOISE SOURCES

FIGURE 4.13-9

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

Construction

Construction of the proposed project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used in the vicinity of nearby sensitive land uses. Construction activities would include site demolition work, preparation work, excavation, foundation work, and new building framing and finishing. Impact pile driving (which generates substantial vibration) is not proposed as a method of construction.

The nearest off-site existing buildings are 115 feet from the project site. These existing structures are newer industrial buildings with low susceptibility to vibration damage because the buildings were constructed in accordance with modern building codes. There are no historical buildings on-site or within one mile of the project site as described in Section 4.5 Cultural Resources. Table 4.13-17 lists the vibration levels for typical construction equipment at 25 feet and at the nearest industrial building. The equipment below is representative of conventional construction equipment and not indicative of the exact equipment the project may require during construction.

Table 4.13-17: Reference Construction Equipment Vibration Levels (VdB)

Equipment	Maximum Vibration Level at 25 Feet	Projected Maximum Levels at 115 Feet (Industrial Building)
Vibratory Roller	94	62
Hoe Ram	87	62
Large bulldozer	87	62
Loaded trucks	86	61
Jackhammer	79	58
Small bulldozer	58	<55

VdB = vibration decibels

Source: Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment SVY03A Data Center Campus.* September 2023.

As shown in Table 4.13-17, the maximum vibration levels at the nearest industrial building (115 feet away) would range from 55 VdB to 62 VdB. These vibration levels would be below the FTA threshold of 98 VdB for modern engineered structures. The on-site construction generated vibration levels would also be below the human threshold of perception, which is 65 VdB, at the nearest off-site structure. The off-site telecommunication line construction activities would be within 50 feet of an existing modern engineered industrial building. Based on the reference maximum vibration levels at 25 feet shown in Table 4.13-17, the projected vibration levels at 50 feet would range from 57 VdB to 75 VdB. The projected vibration levels at 50 feet would also be below the FTA threshold of 98 VdB for modern engineered structures. Based on the above analysis, the project would not result in

generation of excessive ground borne vibration or ground borne noise and impacts would be less than significant. **(Less than Significant Impact)**

Operation

The project would not install any equipment that would generate vibration. The emergency generators would not produce perceptible vibration when tested. Therefore, the project would not result in the exposure of persons to excessive groundborne vibration levels at nearby existing off-site industrial uses. **(No Impact)**

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?

Pursuant to Hayward General Plan Policy HAZ-8.15, the city shall require project applicants to evaluate potential airport noise impacts if the project is located within the 60 dB CNEL contour line of the Hayward Executive Airport or Oakland International Airport. The nearest airport to the site is Hayward Executive Airport, approximately 1.7 miles to the northeast of the project site. The Oakland International Airport is over seven miles northwest of the project site.

The project site is located within an adopted AIA, but the site is located outside the Hayward Executive Airport's and the Oakland International Airport's noise contour levels of 60 dBA CNEL.[76] Since the project site is not within the noise contours for either airport, the project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

4.13.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant noise impact?

The project's noise and vibration impacts are localized; therefore, the geographic study area is the project site and surrounding area (within 1,000 feet of the project site).

[76] Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-3 HWD Noise Compatibility Zones and Figure 3-4 HWD Safety Compatibility Zones.

Construction

According to the City of Hayward, there are no cumulative projects within 1,000 feet of the project site that would be under construction while the proposed project is being constructed.[77] . Furthermore, construction noise would be temporary and construction measures would be required to be implemented by this project and any other cumulative projects to reduce construction noise vibration impacts pursuant with Municipal Code Section 4-1.03. For these reasons, there would be no significant cumulative impact with respect to construction noise, and the project would not result in a cumulatively considerable contribution to this already less than significant cumulative noise and vibration impact. **(Less than Significant Cumulative Impact)**

Operation

With respect to cumulative operational impacts, the project would include new sources of operational noise, such as rooftop mechanical equipment and emergency generators. As described above, the project would not generate substantial noise levels at adjacent property lines or nearby sensitive receptor. All cumulative projects would be required to prepare a project level environmental noise analysis pursuant with General Plan Policy HAZ-8.2. Compliance with this policy would ensure that all new developments are compatible with the surrounding land uses and/or incorporate noise mitigation when an impact is identified. Therefore, the project would result in a less than significant cumulative noise impact. **(Less than Significant Cumulative Impact)**

[77] The City of Hayward's Development Explorer map shows one project within 1,000 feet of the project site. The Hayward Exchange @ 92 at 25800 Clawiter Road is located 550 feet northeast of the project site. Construction of this development is nearly complete and is not anticipated to have construction activities at the time the proposed project is approved and constructed. Source: City of Hayward. "Development Explorer." Accessed July 7, 2023.

4.14 Population and Housing

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[78] The City of Hayward Housing Element and related land use policies were adopted and submitted to the HCD on June 7, 2023. The Housing Element remains under review of the HCD as of September 2023.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[79]

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

[78] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed March 15, 2023. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[79] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 *Existing Conditions*

According to the last Census, the City of Hayward had a population of 162,954 in April 2020. As of January 2022, there are approximately 52,268 residential units in the City.[80] According to ABAG projections, Hayward's population is expected to grow to a total of 178,270 by 2040.[81]

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 sf.[82] The buildings are multi-tenant warehouse/office/light-industrial buildings. There are approximately 172 existing employees on-site.[83]

4.14.2 Impact Discussion

For the purpose of determining the significance of the project's impact on population and housing, would the project:

1) 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)?
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

4.14.2.1 *Project 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)?

The SVY03A Campus will include a new three-story data center building (SVY03ADC1); a one-story smaller data center building (SVY03ADC2), backup generators to support both data centers

[80] California Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State 2021-2022 with 2020 Census Benchmark. Accessed March 15, 2023. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/

[81] Association of Bay Area Governments. "Projections 2040." Accessed March 15, 2023. Available at: http://projections.planbayarea.org/.

[82] The square footage of the nine existing buildings are 29,800 sf, 22,927 sf, 13,552 sf, 22,804 sf, 15,400 sf, 16,974 sf, 17,136 sf, 16,908 sf, and 11,970 sf.

[83] According to the ITE Trip Generation Handbook, 10th edition, an Industrial Park land use would generate 3.37 daily trips per 1,000 square feet, or 2.91 daily trips per employee. By calculating the daily trips per square footage (693 daily trips), the equation assumptions were used to backtrack calculate the site's estimated employment. The following equation was used: 2.91 * X = 693. This gives an employment count of 238. However, as of September 2023, only 84 of the 121 units on-site are currently occupied (72 percent). The employee count was calculated as follows: (238 * .72)/2 = 171.4

(SVY03ABGF), a security building, an on-site project substation, and a PG&E switching station. The project would be a low-employment-generating use, with approximately 45 employees. The existing site currently has an estimated 172 employees, therefore operation of the project would result in a reduction of jobs in the City. The project would result in a temporary increase in jobs during construction. As described in Section 3.0 Project Description, the peak construction workforce would be approximately 150 workers per month, with an average of 100 workers per month. Construction workers are anticipated to come from the greater Bay Area. Therefore, this temporary increase would not result in substantial permanent population growth in the area.

The proposed project would not induce substantial population growth in the City and would, therefore, result in less than significant population and housing impacts. **(Less than Significant Impact)**

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

The project site does not include residents or housing units and, therefore, the project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

4.14.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant population and housing impact?

The proposed project would not remove any housing or displace any people. Cumulative projects in the City could potentially remove housing and/or facilitate unplanned growth; however, the General Plan incorporates a policy for the planned buildout to 2040 (Policy LU-1.3) to direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan. New housing developments as part of the General Plan buildout would focus on an intensification of land use in already developed areas.

The General Plan EIR concluded less than significant impacts for housing and population. The project would be a low employment-generating use. **(Less than Significant Cumulative Impact)**

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Hayward District Recreation & Parks Master Plan

The Hayward Area Recreation and Park District's (HARD) latest recreation and master plan is the 2019 HARD Recreation and Parks Master Plan. The master plan guides the short and long range development of parks and recreation facilities within the HARD service area, which includes the City of Hayward and the unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview (approximately 104 square miles). The 2019 HARD Recreation and Parks Master Plan identifies population growth through 2030 and explains how the anticipated population increase would impact current park systems.

The current HARD system includes 104 parks, playfields and special facilities covering approximately 1,357 acres. In addition to parks, the District has four aquatic centers, two golf courses, and special facilities including the Hayward Japanese Gardens, Douglas Morrisson Theater, Shoreline Interpretive Center, and Sulphur Creek Nature Center. Approximately 27 new parks and facility improvements are planned and expected to be developed in the near future. Consistent with the 2006 version of the master plan, the 2022 version endorses a goal of 8 to 12 acres of park land of all types—including regional parks—per 1,000 people. To meet the desirable standard of parks per 1,000 people, at least 113 acres of additional park facilities (including local parks, community parks, school recreation sites, linear parks, greenways, and trails) would be needed but 838 acres would be optimal.

HARD Trails + Open Space Master Plan

The HARD Trails + Open Space Master Plan is a regional trails plan for the HARD service area and was approved by the HARD Board of Directors on August 10, 2021. It provides a framework for implementing the HARD's vision of providing a trails connecting neighborhoods with transit, parks with other parks, and our urban communities with the shoreline and hills that frame our part of the Bay Area. The plan envisions a future of network trails that would be constructed in three separate phases.

Hayward 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to public services and are applicable to the proposed project.

Policy	Description
CS-2.4	Response Time for Priority 1 Calls. The City shall strive to arrive at the scene of Priority 1 Police Calls within 5 minutes of dispatch, 90 percent of the time.
CS-2.14	Development Fees. The City shall consider the establishment of development impact fees to help fund Police Department operations.
CS-3.2	Fire and Building Codes. The City shall adopt and enforce fire and building codes
CS-3.3	Development Review. The City shall continue to include the Fire Department in the review of development proposals to ensure projects adequately address fire access and building standards.
CS-3.4	Adequate Water Supply for Fire Suppression. The City shall require new development projects to have adequate water supplies to meet the fire suppression needs of the project without compromising existing fire suppression services to existing uses.
CS-4.12	Development Fees. The City shall consider the establishment of development impact fees to fund Fire Department operations.
EDL-3.11	School Impact Fees. The City shall coordinate with school districts to ensure that the impacts of new development are identified and mitigated through the payment of school impact fees in accordance with State law.
EDL-6.1	Standard for Library Space. The City shall strive to expand library space within the community to meet and maintain a minimum standard of 0.75 square feet of space per 1,000 residents (excluding school and college libraries).

EDL-6.2 Main Library. The City shall continue to seek funding for the construction of a new and expanded Main Library in Downtown Hayward.

HQL-10.2 Parks Standard. The City shall seek to increase the number of parks throughout the city by working with HARD to achieve and maintain the following park standards per 1,000 Hayward residents:

- Two acres of local parks,
- Two acres of school parks,
- Three acres of regional parks,
- One mile of trails and linear parks, and
- Five acres of parks district-wide.

EFS-1.4 Development Fair Share. The City shall, through a combination of improvement fees and other funding mechanisms, ensure that new development pays its fair share of providing new public facilities and services and/or the costs of expanding/upgrading existing facilities and services impacted by new development (e.g., water, wastewater, stormwater drainage).

4.15.1.2 *Existing Conditions*

Fire Protection Services

The Hayward Fire Department (HFD) provides fire protection services throughout the City. The HFD staffs nine different stations housing nine engine companies and two truck companies.[84] The closest fire station to the project site is Fire Station 4, located at 27836 Loyola Avenue, approximately 2.5 miles southeast of the project site.

Police Protection Services

The Hayward Police Department provides police protection services throughout the City. The HPD has a staff of 300, including sworn and professional personnel.[85] The Hayward police headquarters is located at 300 West Winton Avenue, approximately 3.3 miles northeast of the project site.

Schools

The project site is served by the Hayward Unified School District. Students in the project area attend Lorin Eden Elementary School, located at 27790 Portsmouth Avenue (approximately two miles southeast of the project site), Anthony W. Ochoa Middle School, located at 2121 Depot Road (approximately two miles northeast of the project site), and Mt. Eden High School, located at 23000 Panama Street (approximately two miles southeast of the project site).[86]

Parks

The City of Hayward contains more than 3,000 acres of parks and open space and features 20 miles

[84] Hayward Fire Department. "Stations." Accessed August 9, 2023. https://www.hayward-ca.gov/fire-department/stations

[85] Hayward Police Department. "Divisions." Accessed August 9, 2023. https://www.hayward-ca.gov/police-department/about

[86] Hayward Unified School District. "School Locator." Accessed August 11, 2023. https://portal.schoolsitelocator.com/apps/ssl/?districtcode=41834.

of running and hiking trails. The City does not administer its own parks. Parks within the City are managed by the Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD). The nearest park to the project site is Rancho Arroyo Park, located at 2121 Depot Road, approximately 1.5 miles northeast of the project site and Mount Eden Park, located at 2451 W. Tennyson Road, approximately 2.5 miles east of the project site.

Other Public Facilities

Libraries

The Hayward Public Library provides library services within the City of Hayward. The Hayward Public Library consists of two branch locations. The nearest library branch to the project site is the Weekes Branch Library, located at 27300 Patrick Avenue, approximately three miles east of the project site.

Community Centers

The HARD operates 11 community centers available for rent within its total jurisdiction, which includes all of the City of Hayward as well as some unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview.[87] The nearest community center to the project site is the Southgate Community Center, located at 26780 Chiplay Avenue, approximately two miles east of the project site. The Southgate Community Center features meeting rooms, a kitchen, and a patio.

4.15.2 Impact Discussion

For the purpose of determining the significance of the project's impact on public services, 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:

1) Fire protection?
2) Police protection?
3) Schools?
4) Parks?
5) Other public facilities?

[87] Hayward Area Recreation and Park District. "Community Centers." Accessed August 11, 2023. https://www.haywardrec.org/130/Community-Centers.

4.15.2.1 *Project 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 fire protection services?

The Hayward Fire Department currently serves the existing industrial buildings onsite. The project would have a total of 45 full-time employees and vendors. The project would not increase the service population as compared to the existing employee population onsite, and in fact would reduce the employee count on the site from approximately 175 to 45 daily employees. Therefore, the proposed project would not expand the demand for fire protection services and would result in a less than significant impact on service ratios, response times, or other performance objectives for fire protection services. The project would not individually require new or altered fire protection facilities, and as a result, would have a less than significant impact on the environment. **(Less than Significant Impact)**

b) 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 police protection services?

The Hayward Police Department currently serves the existing industrial buildings onsite. The project would have a total of 45 full-time employees and vendors and would decrease the number of employees onsite compared to the existing uses. The project would not result in an incremental increase in the need for police services and would not require the construction of new facilities or stations. Therefore, the proposed project would not expand the demand for police protection services and would result in a less than significant impact on service ratios, response times, or other performance objectives for police protection services. **(Less than Significant Impact)**

c) 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 schools?

The project would not generate substantial population growth in the surrounding project area because the project would not directly generate new residents since it is a non-residential development. The project proposes a data center campus, not a residential use; therefore, no new students would be generated. Project implementation would not impact existing school services or

result in the need for new or physically altered schools in the project area. Regardless, the project would be required to pay school impact fees pursuant with SB 50, which would assist the Hayward Unified School District with the construction of new school facilities necessitated by the impact of residential and commercial development activity. **(No Impact)**

d) 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 parks?

The proposed project would not generate substantial population growth in the surrounding project area or result in the increased use of park facilities by new residents. Some employees at the project site may visit local parks. However, the use of the local parks and facilities by employees would not over burden existing facilities or create the need for any new facilities or adversely impact the physical condition of existing facilities. **(Less than Significant Impact)**

e) 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 other public facilities?

The project would not generate substantial population growth in the surrounding project area or result in the increased use of public facilities by new residents. The project would not generate new residents. Some future employees generated by the project may visit library facilities; however, this would be a negligible increase and would not create the need for any new facilities or adversely impact the physical condition of existing facilities. **(No Impact)**

4.15.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant public services impact?

The geographic area for cumulative public services impacts is the city of Hayward. All cumulative projects would be required to undergo environmental review to determine if the service population generated by the project would require the construction or expansion of new buildings to maintain the objectives of the fire and police departments. The project would not develop residences and, therefore, would not result in a cumulatively considerable contribution to school impacts. The project would not result in a meaningful increase in the use of parks or other recreational facilities and, therefore, would not result in cumulative park and recreational facility impacts. All cumulative projects, including the proposed project, would be required to be built in conformance with then-

current Building and Fire Codes and public safety requirements in the General Plan. For this reason, the project would result in a less than significant cumulative impact to police and fire facilities. **(Less than Significant Cumulative Impact)**

4.16 Recreation

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Hayward 2040 General Plan

The Hayward 2040 General Plan (General Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to recreation and are applicable to the proposed project.

Policy	Description
HQL-10.2	Parks Standard. The City shall seek to increase the number of parks throughout the city by working with HARD to achieve and maintain the following park standards per 1,000 Hayward residents: • Two acres of local parks, • Two acres of school parks, • Three acres of regional parks, • One mile of trails and linear parks, and • Five acres of parks district-wide.

4.16.1.2 *Existing Conditions*

Parks

The City of Hayward contains more than 3,000 acres of parks and open space and features 20 miles of running and hiking trails. The City does not administer its own parks. Parks within the City are managed by the Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD). The nearest park to the project site is Rancho Arroyo Park, located at 2121 Depot Road, approximately 1.5 miles northeast of the project site and Mount Eden Park, located at 2451 W. Tennyson Road, approximately 2.5 miles east of the project site.

4.16.2 Impact Discussion

For the purpose of determining the significance of the project's impact on recreation:

1) 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?
2) 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?

4.16.2.1 *Project 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?

Unlike residential development, which increases City population and associated demand on City parks, the proposed industrial development would not create demand for more parks within the City. While employees of the proposed project may use nearby parks, such as Rancho Arroyo Park and/or Mount Eden Park, during breaks or before or after work, the incremental increase in use would not result in the deterioration of these facilities. Furthermore, the project would be required to pay the City's park impact fee toward new parks and needed improvements to existing parks within the City. For these reasons, the proposed project would not result in the need for new or physically altered parks in the project area. **(Less than Significant Impact)**

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?

The proposed industrial development does not include recreational facilities. As discussed in checklist question a) above, employees may use parks and recreational facilities in the project area during breaks or before or after work. However, usage of these facilities by future employees would not be substantial enough to require the construction of new recreational facilities or the expansion of existing recreational facilities. For these reasons, the project would not result in impacts due to the construction or expansion of recreational facilities. **(Less than Significant Impact)**

4.16.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant recreation impact?

Other projects in the City, in particular new residential developments, could increase the use of recreational facilities, such as neighborhood and regional parks and community centers, to the point of disrepair. In the 2040 General Plan EIR, the City identified that with expected population growth through 2040, additional parks and community centers would be required to accommodate the increase in population. Existing City policies and regulations included in the General Plan and Parks and Recreation Master Plan, as well as the City's partnership with HARD, function to collect fees from new development (or require parkland to be dedicated) for the purpose of maintaining the City's service level objectives. By requiring cumulative projects to adhere to existing policies and regulations, the cumulative impact of future development on recreational facilities would be minimized.

The proposed project does not include new residential development; therefore, its impact on recreational facilities in the project area would be minimal. The proposed project, when combined with other projects in the City, would not result in a cumulatively considerable contribution to this already less than significant cumulative recreation impact. **(Less than Significant Cumulative Impact)**

4.17 Transportation

The following discussion is based, in part, on a Transportation Impact Analysis prepared by Kimley-Horn in September 2023. The Transportation Impact Analysis is included as Appendix H to this SPPE Application.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Alameda County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Specifically, CEQA Guidelines Section 15064.3(b)(2) provides that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, would have a less than significant impact. This section further provides that lead agencies have discretion to evaluate roadway capacity projects (including highways), provided that any such analysis is consistent with the requirements of CEQA. Recognizing that roadway capacity projects may be analyzed at a programmatic level, subdivision (b)(2) states that lead agencies may be able to tier from a programmatic analysis that adequately addresses the effects of roadway capacity projects.

Regional and Local

Congestion Management Program

Alameda County Transportation Commission (Alameda CTC) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. Alameda CTC has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

City of Hayward Transportation Impact Analysis Guidelines

The City's Transportation Impact Analysis (TIA) Guidelines, dated December 2020, provide CEQA transportation analysis exemption screening criteria for certain development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less than significant VMT impacts. According to the guidelines, the VMT screening criteria would be met for residential projects that are located in either of the following locations:

- Within a half mile of a major transit stop
- In an area with low (below the threshold) VMT per capita and in an area with planned growth

Projects must also meet the following criteria to be exempt from further VMT analysis:

- Density/FAR – Minimum of 35 units per acre as applicable for residential projects
- Parking – No more than the minimum number of parking spaces required; in cases where no minimum is required and a maximum is identified, no more than the maximum number of parking spaces
- Does not replace affordable residential units with a small number of moderate – or high income residential units
- Consistent with Plan Bay Area, the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission)

Projects that do not meet the screening criteria are required to conduct a VMT analysis and provide mitigation measures for significant impacts.

Hayward 2040 General Plan

The Hayward 2040 General Plan (General Plan) includes policies for the purpose of avoiding or

mitigating impacts resulting from development projects within the City. The following policies are specific to transportation and are applicable to the proposed project.

Policy	Description
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.
M-1.5	Flexible LOS Standards. The City shall consider flexible Level of Service (LOS) standards, as part of multimodal system approach, for projects that increase transit-ridership, biking, and walking in order to reduce air pollution, energy consumption, and greenhouse gas emissions.
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.
M-1.8	Transportation Choices. The City shall provide leadership in educating the community about the availability and benefits of using alternative transportation modes.
M-3.3	Balancing Needs. The City shall balance the needs of all travel modes when planning transportation improvements and managing transportation use in the public right-of-way.
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.
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.
M-4.1	Traffic Operations. The City shall strive to address traffic operations, including traffic congestion, intersection delays, and travel speeds, while balancing neighborhood safety concerns.
M-4.2	Roadway Network Development. The City shall develop a roadway network that categorizes streets according to function and type as shown on the Circulation Diagram and considering surrounding land use context.
M-4.3	Level of Service. The City shall maintain a minimum vehicle Level of Service E at signalized intersections during the peak commute periods except when a LOS F may be acceptable due to costs of mitigation or when there would be other unacceptable impacts, such as right-of-way acquisition or degradation of the pedestrian environment due to increased crossing distances or unacceptable crossing delays.
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.
M-5.8	Parking Facility Design. The City shall ensure that new automobile parking facilities are designed to facilitate safe and convenient pedestrian access, including clearly defined internal corridors and walkways connecting parking areas with buildings and adjacent sidewalks and transit stops and adequate lighting.
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.
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.
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 Association to reduce parking needs and vehicular travel.

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.
M-11.3	Truck Parking in Neighborhoods. The City shall prohibit overnight and other specified truck parking activities in residential areas.

City of Hayward Bicycle and Pedestrian Master Plan

On September 29, 2020, the Hayward City Council adopted the 2020 Bicycle and Pedestrian Master Plan (BPMP), which details the City's plan to establish a network of accessible, safe, and integrated bicycle and pedestrian facilities. The 2020 BPMP replaces and builds on the City's original 2007 Bicycle Master Plan with its inclusion of pedestrian-centered facilities and extensive public input. The new plan recommends a total of 153 miles of new bicycle facilities, including 32 miles of multiuse paths for both pedestrians and cyclists.

4.17.1.2 *Existing Conditions*

Regional Roadway Network

Regional access to the project site is provided by State Route 92 (SR 92). Local access to the project site is provided via Clawiter Road, Eden Landing Road, Investment Boulevard and Production Avenue.

State Route 92 (SR-92) is an east-west freeway extending from Interstate 280 to the Alameda County line, and includes the San Mateo Bridge across the San Francisco Bay. In the vicinity of the project site, SR 92 provides three eastbound lanes and four westbound lanes.

Clawiter Road is a north-south collector roadway south of Depot Road and designated as a truck route by the City of Hayward. It is a two-lane facility south of Industrial Boulevard. A two-way left-turn lane runs between Enterprise Avenue and the railroad crossing north of the SR-92 interchange.

Eden Landing Road is a north-south collector roadway south of SR-92. It connects to Clawiter Road at the SR-92 interchange and extends to the east through a light industrial area and terminates to the south at Mt. Eden Creek. It is a four-lane facility that narrows to a two-lane facility.

Investment Boulevard is a two-lane east-west collector roadway south of SR-92. It spans from Eden Landing Road to the west to Corporate Avenue to the east. It is a four-lane facility that narrows to a two-lane facility.

Production Avenue is a small two-lane collector roadway spanning from Eden Landing Road to the north to Investment Boulevard to the south.

Existing Bicycle Facilities

There is an existing Class II bike lane along Eden Landing Drive which provides access to the project site. Additionally, a partial Class III bike Route has been implemented along Clawiter Road, and per

the BPMP, Clawiter Road is envisioned to be a Class II bicycle lane/buffered bicycle lane in the future.

Existing Pedestrian Facilities

There is currently a sidewalk on the northwest side of Eden Landing Drive. Sidewalks are not currently provided along the frontage of the project site, or along the surrounding street network. In the future, Clawiter Road is planned to have enhanced pedestrian facilities and act as a pedestrian collector per the BPMP.

Existing Transit Services

Existing bus service in the project vicinity is provided by the Alameda-Contra Costa Transit District (AC Transit). AC Transit primarily provides bus service throughout Alameda County and Contra-Costa County with connections to other transit services in the area. Currently there are no bus routes that operate within walking distance (0.5 mile or 2640 feet) of the project site. The closest operating route is Route 86, which operates along Depot Road and Industrial Boulevard in the vicinity of the project site. Route 86 operates from 4:00 AM to 12:00 AM with a headway of 35 minutes. The nearest bus stop (approximately one-mile walking distance) to the project site is located on the south side of Depot Road, approximately 90 feet east of Clawiter Road.

4.17.2 Impact Discussion

For the purpose of determining the significance of the project's impact on transportation, would the project:

1) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4) Result in inadequate emergency access?

4.17.2.1 *Project Impacts*

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?

Transit Facilities

The proposed project is expected to have 45 employees, which is less than existing conditions on the site of approximately 175 employees occupying existing buildings. The project is expected to generate very few trips via transit services and would result in a reduction compared to existing

conditions. Due to the very small volume of transit trips associated with the project, they can be accommodated by the existing transit capacity. Therefore, the project would not conflict with or impede implementation of a program, plan, ordinance, or policy addressing transit facilities.

Bicycle Facilities

As discussed previously, there is an existing Class II bike lane along Eden Landing Drive which provides access to the project site. Additionally, a partial Class III bike Route has been implemented along Clawiter Road, and per the BPMP, Clawiter Road is envisioned to be a Class II bicycle lane/buffered bicycle lane in the future. The proposed project would not include any permanent structures within the Eden Landing Road or Clawiter Road right-of-ways or otherwise impede implementation of the planned bikeways on these roads. For these reasons, the proposed project would not conflict with existing and planned bicycle facilities.

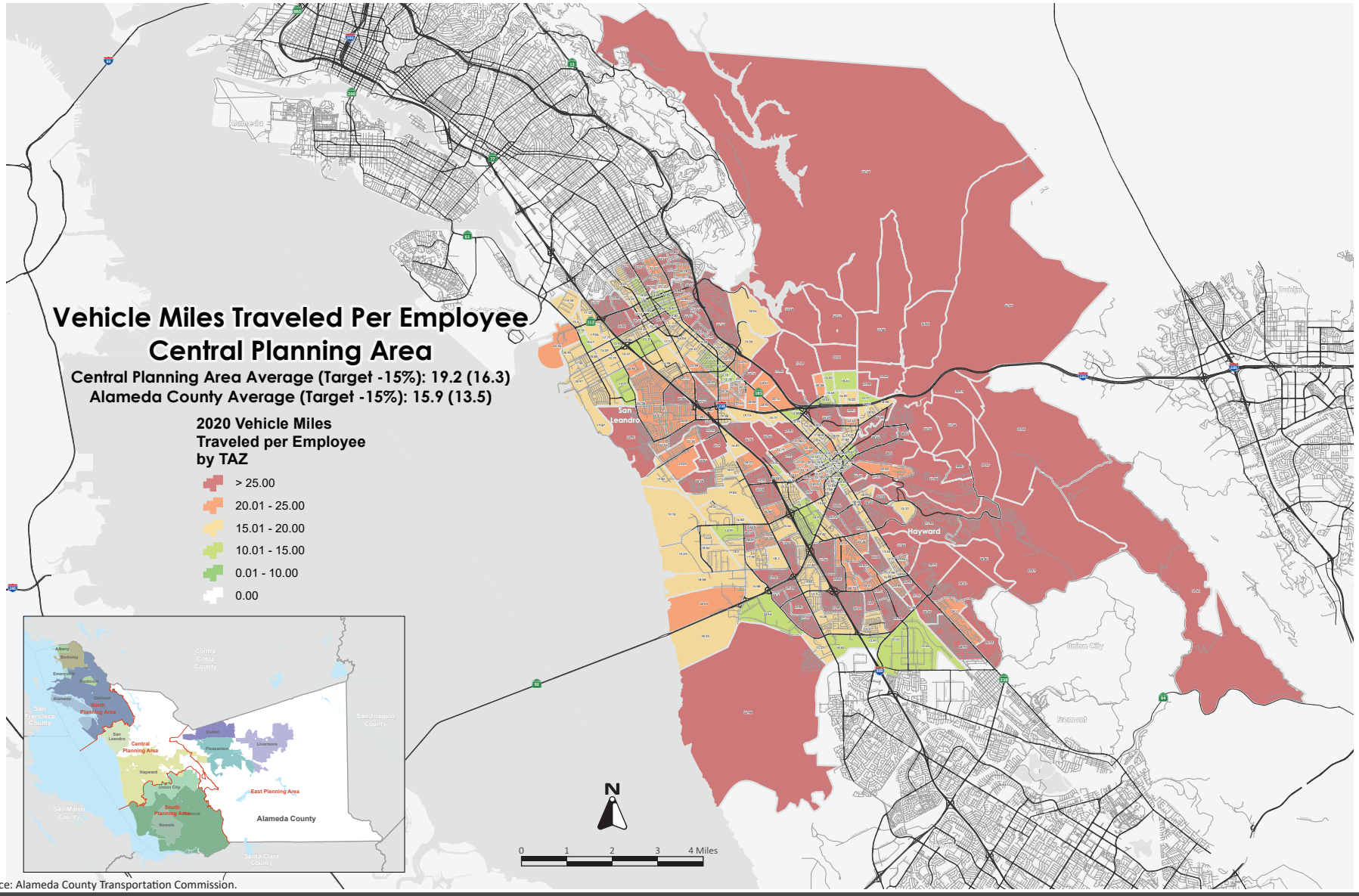
Pedestrian Facilities

Sidewalks are not currently provided along the project frontage. The project would construct a sidewalk along the project frontages on Eden Landing Road, Production Avenue, and Investment Boulevard, thereby improving the pedestrian network in the project area. The project would generate minimal pedestrian traffic and would not conflict with existing or planned pedestrian facilities.

As discussed above, the proposed project would not conflict with or impede implementation of a program, plan, ordinance, or policy addressing transit, bicycle, or pedestrian facilities. **(Less than Significant Impact)**

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

All new development projects within the City of Hayward are required to evaluate the effects of development on the transportation system using the VMT metric and conform to the City of Hayward Transportation Analysis Guidelines. The City of Hayward Transportation Analysis Guidelines provides screening criteria for development projects based on the type of project, characteristics, and/or the location of the project. If a project meets the City's screening criteria, the project is presumed to have a less-than-significant VMT impact and a detailed VMT analysis is not required. Since the project does not satisfy any VMT screening criteria, a VMT analysis was completed for the project to determine if the project's VMT would exceed the City's adopted VMT threshold. For Employment – Industrial, the threshold of significance is the existing regional average VMT per employee. The Alameda CTC developed maps and tables provide VMT per Employee at traffic analysis zones (TAZ) in Alameda County. The map for VMT per employee was utilized to determine the VMT for the project (refer to Figure 4.17-1). The map indicates that the project VMT and County Average VMT are 14.94 and 15.90 VMT per employee, respectively. Because the project's VMT is less than the County Average VMT, the project would have a less-than significant VMT impact. **(Less than Significant Impact)**



ALAMEDA COUNTY VMT PER EMPLOYEE HEAT MAP | FIGURE 4.17-1

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)?

The following site access and circulation evaluation is based on a review of the site plan by Kimley-Horn in September 2023.

Vehicles would primarily access the site from the proposed driveway on Eden Landing Road. Vehicles would pass through a security gate to enter the site. Prior to the security gate, there would be enough space for vehicles and trucks to turn on-site if vehicles are denied access to the stie. There would be another proposed access point on Production Avenue, but it is anticipated to be closed the majority of the time and only be used for transporting equipment or in cases of emergencies.

The on-site site circulation was evaluated for potential hazards, including a review of truck turning movement to determine if a WB-62 truck could access and maneuver throughout the site. The evaluation determined that a WB-62 truck would be able to enter and maneuver the site from the Eden Landing Road driveway. Also, if needed, a WB-62 can make a U-turn in the area prior to the security gate.

As discussed in Section 4.11 Land Use and Planning, the proposed project would be consistent with the existing General Plan land use designation and zoning for the site and would not be considered a change in land use. For this reason, the proposed project would not result in a substantial increase in hazards due to a change in land use.

For the reasons discussed above, the proposed project would not substantially increase hazards due to a geometric design feature or land use change. **(Less than Significant Impact)**

d) Would the project result in inadequate emergency access?

Emergency access to the project site would be provided via the proposed driveways on Eden Landing Road and Production Avenue. The California Fire Code requires a minimum width of 20 feet for emergency vehicle access roads. The proposed driveways on Eden Landing Road and Production Avenue would have widths of 45 feet and 28 feet, respectively. Additionally, all proposed drive aisles on-site have a width of at least 26 feet. Therefore, the project would not result in inadequate emergency access. **(Less than Significant Impact)**

4.17.2.2 *Cumulative Impacts*

e) Would the project result in a cumulatively considerable contribution to a significant cumulative transportation impact?

The Transportation Impact Analysis determined that the project would have a less than significant VMT impact, which is a measure of the project's contribution to cumulative VMT in the region. The

project would also be consistent with plans and policies addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. As a result, the project would not result in a cumulatively considerable contribution to cumulative impacts in these areas. Additionally, the project would not create any transportation-related hazards or result in inadequate emergency access. For these reasons, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative transportation impact. **(Less than Significant Cumulative Impact)**

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

Hayward is situated within the historic territory of the Chochenyo Tribelet of the Costanoan Indians (also known as the Ohlone).[88] Historic accounts suggest that the Native Americans may have had a village site along San Lorenzo Creek as well as temporary camps in its vicinity. The Costanoan aboriginal way of life disappeared by 1810 due to introduced diseases, a declining birth rate, and the impact of the Spanish mission system.[89]

As described in Section 4.5, results of the archaeological pedestrian survey and records search were negative for pre-contact period sites. However, the project site is less than two miles from the San Francisco Bay, a resource-rich area that has been heavily used by humans for millennia.

The Native American Heritage Commission responded to the Sacred Lands File request sent on June 13, 2023 noting that the results of the request were positive. The NAHC search area encompasses

[88] City of Hayward. *Hayward 2040 General Plan Background Report*. January 2014. Page 1-28.
[89] Ibid.

many square miles around the site. Because the specific sacred lands identified in the search are confidential, the nature of the tribal cultural resource and its specific location within the search area is unknown.

4.18.2 Impact Discussion

For the purpose of determining the significance of the project's impact on tribal cultural resources, 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:

1) 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)?
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 subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.18.2.1 *Project Impacts*

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource 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)?

AB 52 provides for consultation between lead agencies and Native American tribal organizations during the CEQA process. Prior to the release of an Environmental Impact Report or Negative Declaration/Mitigated Negative Declaration for public review, a lead agency must provide the opportunity to consult with local tribes.

On March 2, 2016, the Ione Band of Miwok Indians requested AB 52 notification of projects in accordance with Public Resources Code Section 21080.3.1 subd (b). In addition, the Confederated Villages of Lisjan, a tribe that is traditionally and culturally affiliated with the geographic area of Hayward, also requested notification of projects pursuant to AB 52.

The Native American Heritage Commission responded to the Sacred Lands File request sent on June 13, 2023 noting that the results of the request were positive, and provided a list of 13 contacts representing eight tribes with traditional affiliations to the area. On June 20, 2023, letters were sent to the 13 tribal contacts to notify representatives of project plans and request any information of known Native American cultural resources in the project area or vicinity. Follow-up calls were made

on July 24, 2023. As of August 28, 2023, no responses have been received. This informal outreach is in addition to formal Native American consultation under AB 52. It is assumed in this SPPE Application that the CEC, as the Lead Agency, will conduct Tribal Consultation pursuant to the requirements of AB 52 during the EIR preparation process.

There are no known tribal cultural resources on-site that are listed or eligible for listing in the California Register. No tribal cultural features, including sites, features, places, cultural landscapes or sacred places were identified on-site. However, a record search of the NAHC Sacred Lands File was completed for the site and the results were positive. Therefore, the proposed development activities (particularly grading, trenching, and/or excavating) could damage as-yet unrecorded subsurface resources, including tribal resources. Undiscovered tribal resources at the project site could potentially be eligible for listing in local or statewide registers of historical resources. Accordingly, an appropriate process must be followed during site development which would ensure that any resources that are uncovered are properly accounted for and preserved for study.
By following the process set forth in PD CUL-1.1 through PD CUL-1.4 and PD CUL-2.1 the project would avoid any significant impacts to tribal cultural resources discovered during development of the site (refer to Section 4.5 Cultural Resources). Additionally, construction the project would include a Native American monitor on-site. Therefore, the proposed project would have a less than significant impact on tribal cultural resources. **(Less than Significant Impact with Mitigation Incorporated)**

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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?

As discussed under Impact a), there are no known tribal cultural resources on-site, and the project includes measures to reduce potential impacts to less than significant levels should resources be unexpectedly discovered during project construction. For this reason, the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. **(Less than Significant Impact with Mitigation Incorporated)**

4.18.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant tribal cultural resources impact?

The geographic study area for cumulative impacts to tribal cultural resources is the surrounding area (within 1,000 feet of the project site). The City of Hayward's Development Explorer map shows one project within 1,000 feet of the project site. The Hayward Exchange @ 92 at 25800 Clawiter

Road is located 550 feet northeast of the project site.[90] No tribal cultural features, including sites, features, places, cultural landscapes or sacred place have been identified at the site based on available information. It is assumed in this SPPE Application that the CEC, as the Lead Agency, will conduct Tribal Consultation pursuant to the requirements of AB 52 during the EIR preparation process. As a result, the project would not contribute to a cumulative impact to tribal resources. **(No Cumulative Impact)**

[90] City of Hayward. "Development Explorer." Accessed July 7, 2023

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Hayward adopted its most recent UWMP in July 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 610

SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires preparation of a WSA containing detailed information regarding water availability to be provided to the decision-makers prior to approval of specified large development projects that also require a General Plan Amendment. This WSA must be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA. Pursuant to the California Water Code (Section 10912[a]), projects that require a WSA include any of the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- 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;
- A mixed-use project that includes one or more of the projects identified in this list; or
- 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.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025. CalRecycle released an analysis titled "Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals" in August of 2020, which recommended maintaining the disposal reduction targets set forth in SB 1383.[91]

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

[91] CalRecycle. Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. August 18, 2020. https://www2.calrecycle.ca.gov/Publications/Details/1693#:~:text=Analysis%20of%20the%20Progress%20Toward,(DRRR%2D2020%2D1693)&text=SB%201383%20establishes%20targets%20to,75%20percent%20reduction%20by%202025.

Local

Hayward 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to utilities and are applicable to the proposed project.

Policy	Description
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-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-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-5.4	Green Stormwater Infrastructure. The City shall encourage "green infrastructure" design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality)
PFS-5.6	Grading Projects. 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
PFS-5.7	Diversion. The City shall require new development to be designed to prevent the diversion of stormwater onto neighboring parcels.
PFS-5.8	Enhance Recreation and Habitat. The City shall require new stormwater drainage facilities to be designed to enhance recreation and habitat and shall work with HARD to integrate such facilities into existing parks and open space features.
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.
PFS-7.14	Commercial Recycling. The City shall encourage increased participation in commercial and industrial recycling programs, and strive to comply with the recycling provisions approved by the Alameda County Waste Management Authority Board. The City shall work with StopWaste.org to provide technical assistance to businesses to implement mandatory recycling.
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.
PFS-9.5	New Developments. The City shall establish requirements for the installation of state-of-the-art internal telecommunications technologies in new planned developments and office and commercial developments

Hayward Sewer System Management Plan

The purpose of the 2021 Sewer System Management Plan is to provide guidance to the City in the operation, maintenance, and rehabilitation of the sewer assets of the City of Hayward. The SSMP includes a design and performance provision, an overflow emergency response plan, and a system evaluation and capacity assurance plan.

Construction and Demolition Diversion Deposit Program

The Construction and Demolition Diversion Deposit Program (CDDD) requires projects to divert at least 50% of total projected project waste to be refunded the deposit. Permit holders pay this fully refundable deposit upon application for the construction permit with the City if the project is a demolition, alteration, renovation, or a certain type of tenant improvement. The minimum project valuation for a deposit is $2,000 for an alteration-renovation residential project and $5,000 for a non-residential project. There is no minimum valuation for a demolition project and no square footage limit for the deposit applicability. The deposit is fully refundable if C&D materials were reused, donated, or recycled at a City-certified processing facility. Reuse and donation require acceptable documentation, such as photos, estimated weight quantities, and receipts from donations centers stating materials and quantities. Though not a requirement, the permit holder may want to consider conducting an inventory of the existing building(s), determining the material types and quantities to recover, and salvaging materials during deconstruction.

Hayward Urban Water Management Plan (2020)

The UWMP, published in July 2021, is a long-range plan that assesses the City's water supply over a 20-year planning horizon (2040) to ensure adequate water supplies to meet existing and future demands for water. The UWMP presents forecasted supplies and demands, describes conservation programs, and includes a water shortage contingency analysis.

4.19.1.2 *Existing Conditions*

Water Supply

The City of Hayward purchases 100 percent of its potable water from the San Francisco Public Utilities Commission (SFPUC). Under normal conditions, the SFPUC meets demand in its service area from its watersheds, which consist of the Tuolumne River, San Antonio Creek, Upper Alameda Creek, Arroyo Honda, and San Mateo Creek watersheds.[92] The City completed Phase I construction of a one million-gallon tank, a 1.6 million gallons per day (mgd) pump station, and a 0.5 mgd membrane treatment plant at the City's Water Pollution Control Facility, as well as approximately 8.5 miles of distribution pipelines to deliver an estimated 260,000 gallons per day (about 290 acre-feet per year), of recycled water to approximately 31 Phase 1 customers.[93] The project site is not served by recycled water. The City will continue to explore greater opportunities to increase the use

[92] City of Hayward. *2020 Urban Water Management Plan.* July 2021. Page 51.
[93] City of Hayward. "Hayward Recycled Water Project." Accessed August 14, 2023. https://www.hayward-ca.gov/your-government/departments/utilities-environmental-services/recycled-water.

of recycled water throughout the City. The project site is served by an existing 12-inch diameter domestic water line located in Eden Landing Road that connects to an 8-inch diameter domestic water line in Production Avenue.

Storm Drainage

The project site is located within the Mt. Eden Creek Watershed, which extends from State Route 92, Industrial Boulevard, and Arden Road.[94] The project site is currently developed with nine existing industrial buildings, paved surface parking and storage areas, and limited landscaping. Approximately 87 percent (428,000 square feet) of the site is composed of impervious surfaces and the remaining 13 percent (64,000 square feet) is composed of pervious surfaces. The project site currently connects to an existing 18 inch storm drain line in Production Avenue and a 30-inch storm drain on Investment Boulevard.

Wastewater/Sanitary Sewer System

The City of Hayward owns and operates the wastewater collection, treatment, and disposal system that serves the majority of the City, including the project site. Wastewater is collected and transported via underground sewer lines to the City of Hayward Water Pollution Control Facility.[95] The project site is served by an existing eight-inch sanitary sewer that is located in Investment Boulevard along the project frontage.

Solid Waste

Solid waste is collected from Hayward homes and businesses and is processed by Waste Management, Inc. The Hayward community currently recycles or composts 75 percent of its waste.[96] After collection, Waste Management, Inc. first delivers solid waste to the Davis Street Transfer Station in San Leandro to be sorted and combined. Then, residential recyclables are sorted at the Tri-City Economic Development Corporation (Tri-CED) facility in Union City, organics are composted at the Redwood Recycling Center in Marin County, and trash is delivered to the Altamont Landfill outside of Livermore.[97]

4.19.2 Impact Discussion

For the purpose of determining the significance of the project's impact on utilities and service systems, would the project:

[94] Alameda County Flood Control & Water Conservation District. "Interactive Map: Alameda County Watersheds." Accessed August 14, 2023. https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds
[95] City of Hayward. *Hayward 2040 General Plan Background Report*. January 2014. Page 8-26
[96] City of Hayward. Reduce, Reuse, Recycle, Rot. Accessed June 28, 2023. https://www.hayward-ca.gov/your-environment/green-your-life/reduce-reuse-recycle-rot
[97] City of Hayward. "Garbage and Recycling." Accessed September 1, 2023. https://www.hayward-ca.gov/yourenvironment/green-your-community/garbage-and-recycling

1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
4) 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?
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

4.19.2.1 *Project Impacts*

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water Facilities

Potable water use for the project would be primarily for domestic uses such as toilets, sinks and drinking fountains. The SVY03ADC1 would use potable water for cooling during hotter times of the year. The potable water demand of the project would be met by the City, as is discussed under checklist question b) below. The project would install new domestic and fire water lines onsite that would connect with the existing City infrastructure systems located along Eden Landing Road and Production Avenue. The project would not require the construction or expansion of potable water delivery systems or the expansion of the boundaries of the City's service area. Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded potable water facilities.

Wastewater Treatment Facilities

The project would connect to the City's existing sanitary sewer system. An existing eight inch sanitary sewer line located in Investment Boulevard would be used to service the project. In order to connect to the existing sanitary sewer system, the project would install sanitary sewer laterals during grading of the project site. The project would be required to comply with all applicable Public Works requirements to confirm the sanitary sewer line would have capacity for sewer services required by the proposed project.

Stormwater Drainage Facilities

As discussed in Section 4.10 Hydrology and Water Quality, the project would slightly decrease impervious surfaces and runoff on the project site. The project would be required to comply with the MRP, which would remove pollutants and reduce the rate and volume of runoff from the project site to levels that are at or below existing conditions. To maintain existing drainage patterns as feasible, the project would capture flow in catch basins along the drive aisles and convey the runoff through storm drainpipes into the bioretention areas onsite. The project would construct approximately 18,000 square feet of bioretention areas onsite to ensure runoff generated on-site is managed using LID methods. Bioretention areas would eventually discharge to the public storm system in Investment Boulevard. The proposed storm drainage improvements would occur during grading. For these reasons, the proposed project would not result in significant environmental impacts due to the construction or relocation of storm drainage facilities.

Electric Power, Natural Gas, and Telecommunication Facilities

The project would construct a new onsite substation and PG&E Switchyard to connect to PG&E's 115 kV electrical distribution system. PG&E metering equipment would be constructed in the substation with a manual disconnect on the line and load sides of the equipment. Interconnection of the on-site substation to the PG&E distribution system would be through a new PG&E owned and operated switching station. The new switching station would be located immediately adjacent to the onsite substation and would be designed and constructed to PG&E standards. The environmental impacts of electric infrastructure improvements are included in the analysis of this SPPE Application.

The construction of new utility improvements and connection extensions to existing facilities would be subject to the construction-related applicant proposed design measures described in previous sections of this SPPE Application. Implementation of those design measures would reduce impacts related to the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities to less than significant levels. **(Less than Significant Impact)**

b) Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The City of Hayward purchases 100 percent of its water supply from the SFPUC. According to the 2020 UWMP, the City would have sufficient water supply to meet increased demand during normal years through 2040. However, the City would experience water shortages during single-dry and multiple-dry year scenarios every year leading up to 2040.[98] In the event of water shortages, the City would implement its water shortage contingency plan to reduce water demand Citywide. The City has access to five emergency groundwater wells and has emergency water agreements with the EBMUD and the Alameda County Water District (ACWD).

[98] City of Hayward. *The City of Hayward 2020 Urban Water Management Plan*. July 2021. Page 89.

The project would have an annual water demand of 2,899,614 gallons (8.9 acre-feet per year) and a maximum day domestic water demand of 1,500 gallons. Total water demand would be 157,000 gallons per day on a maximum day. The water demand values are reflective of the project's proposed usage and no deduction was taken to account for the existing uses on-site. The 2020 UWMP estimated that the City's total water demand in 2040 would be 7,671 million gallons per year (mgy). The project would represent approximately 0.04 percent of the water demand in the year 2040. While the project would result in an incremental increase in the City's total water demand, the project's addition is a small percentage of the overall water demand in Hayward and the project would not exceed the City's water supplies. Sufficient potable water supplies are available to serve the project.[99] As a result, implementation of the proposed project would not create the need for major new utility or water supply infrastructure and would have a less than significant impact on the City's water supply. **(Less than Significant Impact)**

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

In 2020, 3,922 million gallons of wastewater were collected from the City of Hayward at the Water Pollution Control Facility.[100] This would equate to approximately 10.7 mgd.[101] The Water Pollution Control Facility is permitted to accommodate up to 18.5 mgd of wastewater. The project would generate on average approximately 14,827 gallons of wastewater per day, which would represent approximately 0.08 percent of the Water Pollution Control Facility's permitted daily amount. The wastewater values are reflective of the project's proposed usage and no deduction was taken to account for the existing uses on-site. The project would not exceed the treatment capacity of the Water Pollution Control Facility nor would the project increase the need for wastewater treatment beyond the capacity of the Water Pollution Control Facility. Therefore, the project would not result in a determination by the Water Pollution Control Facility that it does not have adequate capacity to serve the increased demand from the project in addition to its existing commitments. **(Less than Significant Impact)**

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?

Solid waste generated in Hayward that is not recyclable or compostable is sent to the Altamont Landfill. The Altamont Landfill has a remaining capacity of 65 million cubic yards[102] of solid waste

[99] As described in Section 2.3.11 Site Water Supply and Use, the project would not use recycled water on-site because there are no recycled water line connections in proximity to the site.
[100] City of Hayward. *2020 Urban Water Management Plan*. June 2021. Table 6-2.
[101] 3,922 million gallons per year divided by 365 days per year equates to 10.74 million gallons per day.
[102] CalRecycle. "Altamont Landfill & Resource Recovery (01-AA-0009)." Accessed August 30, 2023. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7

and is anticipated to have disposal capacity through 2045.[103] According to Waste Management, Inc., the Altamont Landfill is able to accept unlimited tons of waste for disposal from Alameda County,[104] which includes the City of Hayward. The project would generate approximately 413.16 tons of solid waste per year.[105] Solid waste generated by the project would not exceed the capacity of the Altamont Landfill. Additionally, the project would be required to conform to City plans and policies and other applicable laws and regulations to reduce solid waste generation. Therefore, the project would not generate solid waste in excess of state or local standards or in excess of the Altamont Landfill capacity. **(Less than Significant Impact)**

e) Would the project be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

Consistent with CALGreen requirements, the project would be required to provide on-site recycling facilities, develop a construction waste management plan, salvage at least 65 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measures. The project would comply with solid waste management and reductions statutes and regulations through adherence to existing City of Hayward programs for solid waste disposal, recycling, and composting. **(Less than Significant Impact)**

4.19.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant utilities and service systems impact?

Relocation or Construction of New or Expanded Facilities

The geographic study area for cumulative impacts to utilities and service systems is citywide or within the applicable utility's service area, as noted below. Except for extensions to existing utility infrastructure located adjacent to the project site within existing public rights of way, the project would not require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, natural gas, or telecommunications facilities. The project would require the construction of a new substation and switchyard on the subject site to supply electricity to the site. However, the project would be subject to the applicant proposed design measures to reduce environmental impacts from construction activities. Any proposed new or expanded facilities necessitated by future cumulative development would be subject to a similar environmental review

[103] WM. "Sustainability." Accessed August 30, 2023. https://altamontlandfill.wm.com/sustainability/index.jsp#:~:text=As%20a%20result%2C%20the%20Altamont,the%20management%20of%20discarded%20materials.

[104] WM. "Altamont Landfill." Accessed August 30, 2023. https://altamontlandfill.wm.com/index.jsp

[105] This calculation is based off of CalEEMod's Appendix G Default Data Tables, dated 2022. The solid waste generation was calculated using the default solid waste disposal rate for an industrial park of 1.24 tons per 1,000 square feet. The project's floor area of 333,560 square feet was used for the calculations. The calculation was as follows: (333,560/1,000) x 1.24 = 413,164

process, which would identify necessary mitigation measures to reduce significant environmental effects. Therefore, the project would not result in cumulatively significant effects on the environment related to the relocation or construction of new or expanded facilities.

Water Supply and System

The geographic area for cumulative water supply and system impacts is the service area of the City of Hayward water system. The cumulative projects (including the proposed project) are accounted for in population and employment assumptions of the UWMP, which evaluates growth in water demand based on planned growth through the year 2040. For this reason, there is adequate water supply for the cumulative projects. The project, therefore, would not result in a considerable contribution to a significant cumulative water supply impact. **(Less than Significant Cumulative Impact)**

Sanitary Sewer System/Wastewater Treatment

The geographic area for cumulative sanitary sewer system and wastewater treatment is the City's sanitary sewer system service area. Based on the above discussion, there is sufficient treatment capacity at the Water Pollution Control Facility to serve the project and future cumulative projects. General Plan policies, such as PFS-4.9, would ensure there is adequate water service to all new developments prior to approval. The cumulative projects (including the proposed project) would not result in a significant cumulative impact on wastewater treatment capacity. **(Less than Significant Cumulative Impact)**

Storm Drainage System

The geographic area for cumulative storm drain impacts includes the project site and surrounding area, specifically areas that drain into the Mount Eden Creek watershed. Build out of the cumulative projects would almost always involve redevelopment of existing developed sites that contain impervious surfaces, and these projects would be required to comply with applicable regulations regarding stormwater runoff and infrastructure. For these reasons, the cumulative projects would not result in a significant cumulative impact to the storm drain system. As described above, the project would comply with the MRP and incorporate LID features, such as directing site runoff into bioretention areas to keep runoff rates similar to existing conditions. The project would slightly reduce the amount of impervious surfaces on the site compared to existing conditions, which would reduce runoff. The project, therefore, would not result in a considerable contribution to a significant cumulative storm drain system impact. **(Less than Significant Cumulative Impact)**

Solid Waste

All cumulative projects, including the project, would generate solid waste. The project would represent a small fraction of the overall solid waste generation in the City. All projects proposed in the city of Hayward would be required to conform to City General Plan policies (i.e., PFS-7.12 and PFS-7.21) to reduce solid waste generation and increase waste diversion. As such, the project would

not result in a cumulatively significant solid waste impact. The proposed project would not have a considerable contribution towards a significant cumulative solid waste impact.

All cumulative projects are required to adhere to the requirements of applicable statutes and regulations related to solid waste, including CALGreen, AB 939, AB 341, and local waste diversion requirements. Therefore, the project would not result in a cumulatively significant impact due to noncompliance with federal, state, or local management and reduction statues and regulations related to solid waste. **(Less than Significant Cumulative Impact)**

4.20 Wildfire

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and

- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. [106] The future design and construction of structures, subdivisions and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14.

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Santa Clara Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

4.20.1.2 *Existing Conditions*

The project site is located in an urbanized area of the City of Hayward. The project site is not located in or near a state responsibility area or near lands classified as very high fire hazard severity zones.[107]

4.20.2 Impact Discussion

For the purpose of determining the significance of the project's impact on wildfire, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1) Substantially impair an adopted emergency response plan or emergency evacuation plan?
2) 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?

[106] CAL FIRE. CAL FIRE Santa Clara Unit Strategic Fire Plan. May 8, 2022. https://osfm.fire.ca.gov/media/hjndvue2/2022-santa-clara-contra-costa-alameda-west-stanislaus-west-sann-joaquin-unit-fire-plan.pdf

[107] California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed July 10, 2023. https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

3) 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?
4) 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?

4.20.2.1 *Project Impacts*

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

4.20.2.2 *Cumulative Impacts*

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in cumulative wildfire impacts. **(No Cumulative Impact)**

4.21 Environmental Justice

Based on California Department of Education data shown in Table 4.21-1 below, students attending schools within six miles of the project site fall into the school districts of Hayward Unified, New Haven Unified, San Lorenzo Unified, Fremont Unified, Castro Valley Unified, and San Leandro Unified.[108] The percentage of those living in the school districts of Hayward Unified, San Lorenzo Unified, and San Leandro Unified (in a six-mile radius of the project site) and enrolled in the free or reduced price meal program is larger than those in the reference geography, and thus are considered an environmental justice (EJ) population based on a low income population as defined in Guidance on Considering Environmental Justice During the Development of Regulatory Actions.

Table 4.21-1: Low Income Data Within the Project Area

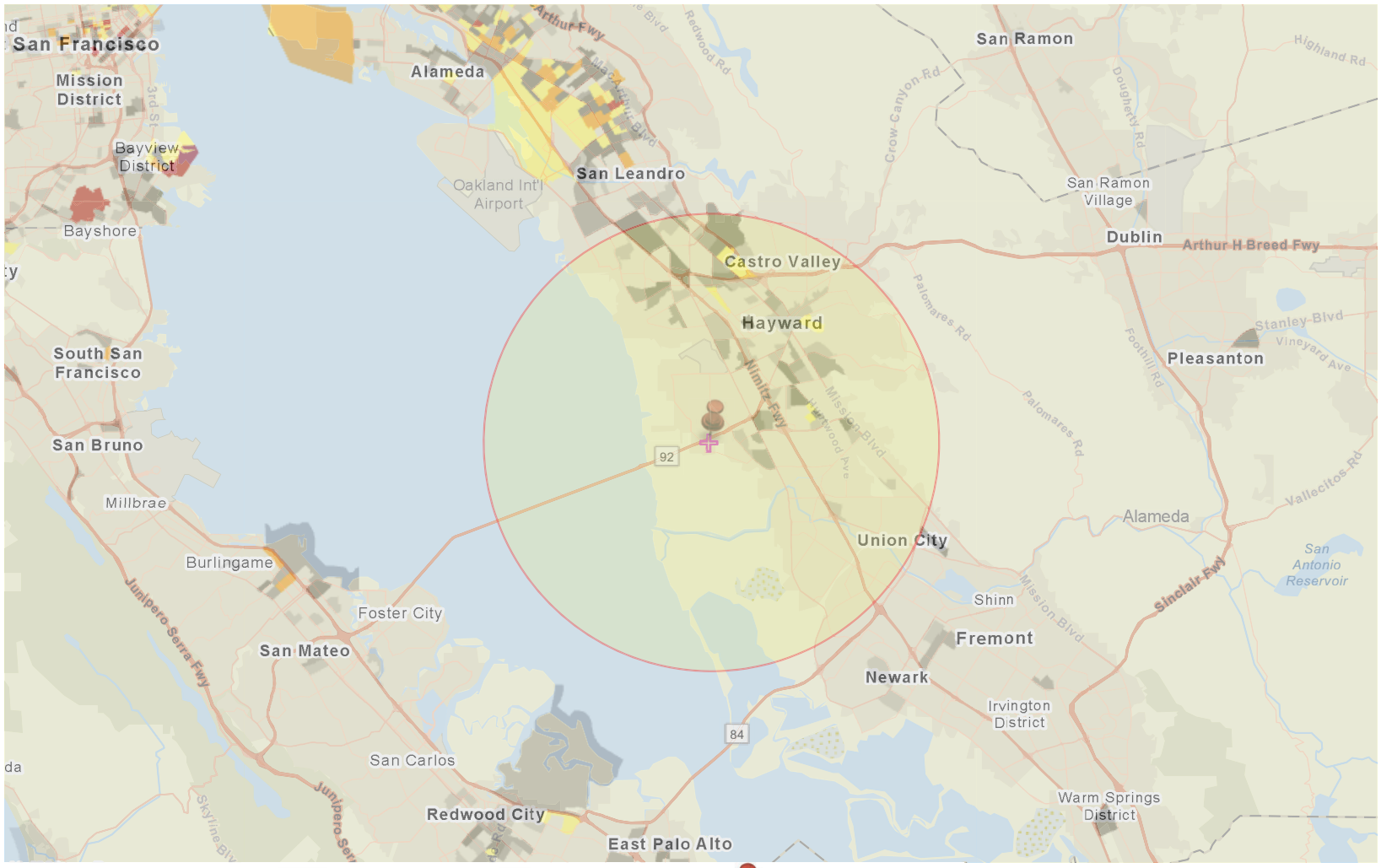
School Districts in Six Mile Radius[109]	Enrollment Used for Meals	Free or Reduced Price Meals	
Hayward Unified	20,517	13,943	68%
New Haven Unified	10,235	4,042	39.5%
San Lorenzo Unified	9,556	7,392	77.4%
Fremont Unified	33,107	7,263	21.9%
Castro Valley Unified	9,207	3,233	35.1%
San Leandro Unified	8,624	6,199	71.9%
Reference Geography			
Alameda County	211,930	94,948	44.8%

Source: California Department of Education. Data Quest, Free or Reduced Price Meals Data 2022-2023, https://dq.cde.ca.gov/dataquest/

Figure 4.21-1 shows low-income population distribution by census blocks within six miles of the project. Figure 4.21-2 shows 2014 – 2018 American Community Survey data of people of color distribution within a six-mile radius of the project. The population in these blocks represents an environmental justice (EJ) population based on race and ethnicity as defined in the United States Environmental Protection Agency's Guidance on Considering Environmental Justice During the Development of Regulatory Actions (US EPA 2015).

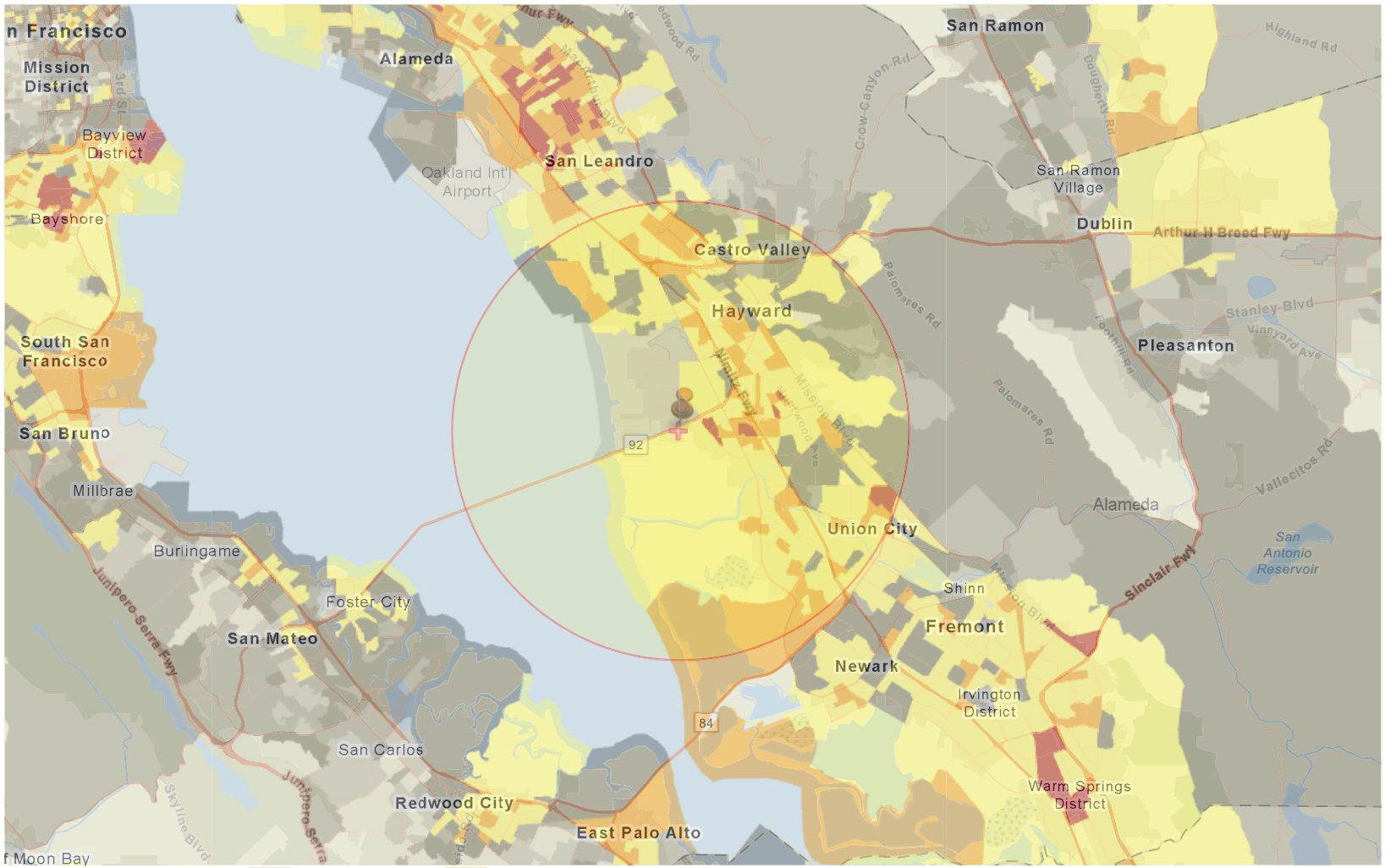
[108] California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2021-2022, http://dq.cde.ca.gov/dataquest/

[109] School districts within six miles of the project site was determined using the following tool: California Department of Education. GIS Mapping, School District Layer. Accessed September 8, 2023.



Source: City of Fremont; California State Parks; Esri, September 8, 2023.

LOW INCOME POPULATION DISTRIBUTION BY CENSUS BLOCKS WITHIN 6 MILES OF THE PROJECT | FIGURE 4.21-1



Source: City of Fremont; California State Parks; Esri, September 8, 2023.

MINORITY POPULATION DISTRIBUTION BY CENSUS BLOCKS WITHIN 6 MILES OF THE PROJECT | FIGURE 4.21-2

4.21.1 Environmental Impacts

The following technical areas discuss impacts to EJ populations: Aesthetics, Air Quality, Cultural and Tribal Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Transportation and Traffic, and Utilities and Service Systems.

Aesthetics

Environmental justice (EJ) populations may experience disproportionate visual impacts if the siting of visually intrusive or degrading projects, particularly industrial facilities, occurs within or near EJ communities to a greater extent than within the community at large.

As depicted in Figure 4.21-2, the project site is located in an area with a high minority population with the adjacent blocks including percentiles of 80th to 90th for people of color. However, as discussed in Section 4.1 Aesthetics, the proposed project is located within an urbanized area of the City of Hayward which already experiences light and/or glare from the surrounding development. The project would be required to conform to the applicable policies and actions set forth in the Hayward 2040 General Plan and applicable development standards set forth in the City of Hayward Municipal Code. The project would comply with the Hayward Industrial Design Guidelines and would be architecturally treated to fit the surrounding context of the site. Implementation of the proposed project would not substantially degrade the existing visual quality or character of the site or its surrounding area. Furthermore, the project site is approximately 2,900 feet from the nearest residences and would not be visible from those residences. Therefore, the proposed project would not have the potential to affect high minority populations. **(Less than Significant Impact)**

Air Quality

The Air Quality section identified the potential public health impacts (i.e., cancer and non-cancer health effects) which could affect the EJ population represented in Figure 4.21-1 and Figure 4.21-2. These potential public health risks were evaluated quantitatively based on the most sensitive population, which includes the EJ population, by conducting a health risk assessment. The results were presented by level of risks. The analysis determined that no one (including the public, off-site nonresidential workers, recreational users, and EJ populations) would experience any acute or chronic cancer or non-cancer effects of health significance during construction and operation of the project. Therefore, construction and operation of the project would not cause significant adverse direct or indirect public health impacts from the project's toxic air emissions and no additional mitigation is needed. Likewise, the project would not cause disproportionate public health impacts on sensitive populations, such as the EJ population represented in Figure 4.21-1 and 4.21-2.

The air quality analysis considers the most sensitive and most protected of the general population, which includes the EJ population; therefore, the conclusions of the analysis would include that of the EJ population. Project impacts were evaluated, and it was concluded that air quality impacts during the construction of the project would be less than significant with Applicant Proposed

Project Measures incorporated and air quality impacts for all criteria pollutants during operation of the project would be less than significant. Both construction and operational emissions from the project with Applicant Proposed Project Measures incorporated would not cause or contribute to a violation of any state or federal ambient air quality standard, or conflict with applicable plans and programs to attain or maintain ambient air quality. Based on these conclusions, the project would not cause disproportionate air quality impacts for sensitive populations like the EJ population represented in Figure 4.21-1 and Figure 4.21-2. **(Less than Significant Impact)**

Tribal Cultural Resources

There are no known tribal cultural resources on-site that are listed or eligible for listing in the California Register. No tribal cultural features, including sites, features, places, cultural landscapes or sacred places were identified on-site. However, a record search of the NAHC Sacred Lands File was completed for the site and the results were positive. Therefore, the proposed development activities (particularly grading, trenching, and/or excavating) could damage as-yet unrecorded subsurface resources, including tribal resources. Undiscovered tribal resources at the project site could potentially be eligible for listing in local or statewide registers of historical resources. Accordingly, an appropriate process must be followed during site development which would ensure that any resources that are uncovered are properly accounted for and preserved for study.
By following the process set forth in PD CUL-1.1 through PD CUL-1.4 and PD CUL-2.1 the project would avoid any significant impacts to tribal cultural resources discovered during development of the site (refer to Section 4.5 Cultural Resources). Additionally, construction the project would include a Native American monitor on-site. **(Less than Significant Impact with Mitigation Incorporated)**

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. The possibility of a disproportionate impact upon the EJ population resulting from the planned storage and use of hazardous materials on the site is low. The project would contain diesel fuel, a hazardous material, to run the emergency generators. As discussed in Section 4.9, each generator unit and its integrated fuel tanks would be designed with double walls. The interstitial space between the walls of each tank would be continuously monitored electronically for the existence of liquids. This monitoring system would be electronically linked to an alarm system that would alert personnel if a leak were detected. Additionally, the standby generator units would be housed within a self-sheltering enclosure that prevents the intrusion of storm water. Therefore, the likelihood of a spill of sufficient quantity to impact the surrounding community and EJ population would be very unlikely and is considered less than significant. The nearest residences to the site are approximately 2,900 feet to the east. Further, implementation of Applicant Proposed Project Design Measures would ensure potential existing soil and groundwater contamination on the site would not be released into the environment. **(Less than Significant Impact)**

Hydrology and Water Quality

A disproportionate hydrologic or water quality impact on an EJ population could occur if a project required substantial groundwater resources or contributed significantly to surface water or groundwater quality degradation.

As discussed in Section 4.10 Hydrology and Water Quality, the project is not located within a designated groundwater recharge zone, and therefore would not require substantial groundwater resources. The project is not expected to significantly contribute to surface water degradation, as it would include stormwater quality best management practices (BMPs) such as directing site runoff into bioretention areas. The project would be required to comply with the Clean Water Act by controlling the discharge of pollutants in storm water during its construction and operation phases. Additionally, implementation of Applicant Proposed Project Design Measures would reduce hydrology impacts to less than significant levels. The project is located in an area determined by FEMA to be outside of the 100-year flood and protected by levee from 100-year flood. Therefore, the project is not expected to negatively impact water quality or flood hazards and would not result in a disproportionate impact to the local EJ population. The project's hydrology and water quality impacts would be reduced to less than significant for all the area's population, including the EJ population. **(Less than Significant Impact)**

Land Use and Planning

A disproportionate land use impact on an EJ population could occur if a project would physically divide the established community of an EJ population or if a project near an EJ population would conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental impacts on a population.

As discussed in Section 4.11 Land Use and Planning, the project would not divide an existing community, as the site is on land designated and zoned for industrial uses and is generally surrounded by industrial uses and commercial uses. The project site is designated Industrial Technology and Innovation Corridor (IC) in the General Plan and located within the Industrial Park (IP) zoning district and would be consistent with the land use designation and zoning district height regulations with approval of a Major Site Plan Review. No conflicts with plans, policies, or related land use regulations would occur. The project would not pose significant individual impacts relating to land use and planning; therefore, no disproportionate impacts on the EJ population would occur either. **(No Impact)**

Noise and Vibration

EJ populations may experience disproportionate noise impacts if unmitigated industrial facilities occur within or near EJ communities to a greater extent than within the community at large. As depicted in Figures 4.21-1 and 4.21-2, the project site is located within an area of low-income and high minority populations, however, the nearest residences are approximately 2,900 feet to the east.

Demolition and construction activities would increase existing noise levels at the adjacent non-residential land uses, but they would be temporary and intermittent. Noise level increases at the nearest residences 2,900 feet to the east would be negligible. As discussed in Section 4.13 Noise and Vibration, implementation of measures incorporated into the project design would reduce construction noise impacts to less than significant levels. Therefore, potential noise effects related to demolition and construction would not result in a significant noise impact on the area's population, including the EJ population.

The noise from operating the facility would not exceed the City's noise limits at the nearest land uses, which are non-residential. The nearest residences are 2,900 feet to the east, at which distance project operation would not be perceptible. Therefore, project noise would comply with the city's noise limits, and thus, its noise impacts would be reduced to less than significant for all the area's population, including the EJ population. **(Less than Significant Impact)**

Population and Housing

The potential for population and housing impacts to EJ populations is predominantly driven by the temporary influx of nonlocal construction workers seeking lodging closer to a project site. For the project, the construction workers would be drawn from the greater Bay Area and would not likely seek temporary lodging closer to the project site. The project would be a low employment-generating use, with approximately 45 employees, once constructed, compared to current employment of approximately 175 employees on the site. Therefore, approval of the project would not substantially increase jobs in the City. The operations workers are also anticipated to be drawn from the greater Bay Area. If some operations workers were to relocate closer to the project site, there would be sufficient housing in the project area.

A population and housing impact could disproportionately affect an EJ population if the project were to displace minority or low-income residents from where they live, causing them to find housing elsewhere. If this occurs, an EJ population may have a more difficult time finding replacement housing due to racial biases and possible financial constraints. As discussed in Section 4.14 Population and Housing, the project would not displace any residents or remove any housing; therefore, there would be no disproportionate impact to EJ populations from this project. **(No Impact)**

Transportation and Traffic

Significant reductions in levels of service have the potential to 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. However, as discussed in Section 4.17 Transportation, all transportation and traffic impacts, including impacts to alternative transportation, would be less than significant, and therefore, would cause less than significant impacts to EJ populations. Likewise, transportation and impacts would not be disproportionate. **(Less than Significant Impact)**

Utilities and Service Systems

A disproportionate utility or service system impact on an EJ population could occur if a project required substantial water resources or significantly impacted wastewater treatment facility and landfill capacity. As determined in Section 4.19 Utilities and Service Systems, adequate water supply is available to serve the project. The project would, therefore, not result in a disproportionate impact to the local EJ population.

There is also significant remaining capacity at the local landfill and wastewater treatment facilities that would be utilized by the project. No changes or expansion to the landfill or wastewater treatment facility would be needed to accommodate this project. The project would also be required to comply with state and local regulations that apply to construction and operation waste. These regulations would require that wastes are managed to meet waste diversion goals and protect public health and safety. The project would, therefore, not have a disproportionate impact on the EJ population.

The project's Utilities and Service Systems impacts would be less than significant for all the area's population, including the EJ population. **(Less than Significant)**

Section 5.0 Growth-Inducing Impacts

Would the project foster or stimulate significant economic or population growth in the surrounding environment?

The CEQA Guidelines require that an EIR identify the likelihood that a proposed project could "foster" or stimulate "economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (Section 15126.2(d)). This section of the SPPE Application is intended to evaluate the impacts of such growth in the surrounding environment.

The project is proposed on an infill site in the City of Hayward. The project includes construction of infrastructure improvements such as an electric substation and a "looped" transmission interconnection involving two offsite transmission line extensions, both of which are intended to serve the project, not the surrounding area. As a result, the project does not include expansion of the existing infrastructure that would facilitate growth in the project vicinity or other areas of the City.

Development of the project site would place a new data center campus in the middle of an industrial area. The proposed project would be compatible with the surrounding land uses and would not pressure adjacent industrial, office, and commercial properties to redevelop with new or different land uses. The project would reduce the amount of employees present on the site, from approximately 175 currently to 45 future employees.

The project would not have a significant growth inducing impact. **(Less than Significant Impact)**

Section 6.0 Significant and Irreversible Environmental Changes

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible changes that would result from the implementation of a proposed project. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, irreversible damage resulting from environmental accidents associated with the Project, and irretrievable commitments of resources. Applicable environmental changes are described in more detail below.

6.1 Use of Nonrenewable Resources

The proposed project, during construction and operation, would require the use and consumption of nonrenewable resources. Unlike renewable resources, nonrenewable resources cannot be regenerated over time. Nonrenewable resources include fossil fuels and metals. Renewable resources, such as lumber and other wood byproducts, could also be used.

Energy would be consumed during both the construction and operational phases of the project. The construction phase would require the use of nonrenewable construction material, such as concrete, metals, and plastics, and glass. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of building materials, preparation of the site, and construction of the buildings. The operational phase would consume energy for multiple purposes including, building heating and cooling, lighting, appliances, and electronics. Energy, in the form of fossil fuels, would be used to fuel vehicles traveling to and from the Project Site.

The project would not result in a substantial increase in demand for nonrenewable resources. The project would, however, be subject to the standard California Code of Regulations Title 24 Part 6 and CALGreen energy efficiency requirements.

As discussed in *Section 4.5, Energy*, the project is consistent with the City's General Plan policies regarding energy use, which fosters development that reduces the use of nonrenewable energy resources in transportation, buildings, and urban services (utilities).

Section 7.0 Significant and Unavoidable Impacts

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented as it is proposed. The project would not result in significant unavoidable impacts, as all significant impacts identified throughout this EIR are capable of being reduced to acceptable levels with implementation of feasible mitigation incorporated into the project.

Section 8.0 Alternatives

8.1 Evaluation Criteria

The primary goal of the SVY03A Campus is to be a state-of-the-art data center campus that provides greater than 99.999 percent reliability (fine nines of reliability). The SVY03A Campus has been designed to reliably meet the increased demand of the digital economy, its customers and the continued growth. The SVY03A Campus purpose is to provide STACK's customers with mission critical space to support their servers, including space conditioning and a steady stream of high-quality power supply. Interruptions of power could lead to server damage or corruption of the data and software stored on the servers by STACK's clients. The SVY03A Campus will be supplied electricity by PG&E through a new distribution substation constructed on the SVY03A Campus site and owned and operated by PG&E.

To ensure a reliable supply of high-quality power, the SVY03ABGF was designed to provide backup electricity to the SVY03ADC1 and SVY03DC2 only in the event electricity cannot be supplied from PG&E and delivered to data center campus. To ensure no interruption of electricity service to the servers housed in the SVY03A Campus buildings, the servers will be connected to uninterruptible power supply (UPS) systems that store energy and provide near-instantaneous protection from input power interruptions. However, to provide electricity during a prolonged electricity interruption, the UPS systems will require a flexible and reliable backup power generation source to continue supplying steady power to the servers and other equipment. The SVY03ABGF provides that backup power generation source.

The SVY03A CAMPUS's project objectives are as follows:

- Develop a state of the art data center campus large enough to meet projected growth;
- Develop the data center campus on land that has been zoned for data center use at a location acceptable to the City of Hayward;
- To incorporate the most reliable and flexible form of backup electric generating technology into the SVY03ABGF considering the following evaluation criteria.
    - **Reliability.** The selected backup electric generation technology must be extremely reliable in the case of an emergency loss of electricity from the utility.
        - The SVY03ABGF must provide a higher reliability than 99.999 percent in order for the SVY03A Campus to achieve an overall reliability of equal to or greater than 99.999 percent reliability.
        - The SVY03ABGF must provide reliability to greatest extent feasible during natural disasters including earthquakes.
        - The selected backup electric generation technology must have a proven built-in resilience so if any of the backup unit fails due to external or internal failure, the system will have redundancy to continue to operate without interruption.

        - The SVY03A Campus data center buildings must have on-site means to sustain power for 24-hours minimum in failure mode, inclusive of utility outage.
    - **Commercial Availability and Feasibility.** The selected backup electric generation technology must currently be in use and proven as an accepted industry standard for technology sufficient to receive commercial guarantees in a form and amount acceptable to financing entities. It must be operational within a reasonable timeframe where permits and approvals are required.
    - **Technical Feasibility.** The selected backup electric generation technology must utilize systems that are compatible with one another.

As part of the preliminary planning and design of the SVY03A Campus and the SVY03ABGF, STACK considered alternatives to the proposed backup generators and use of a smaller capacity system. For completeness purposes, a discussion of the No Project Alternative is also included.

8.2 Reduced Capacity System

STACK considered a backup generating system with less emergency generators but like the No Project Alternative discussed below, any generating capacity less than the total demand of the data center at maximum occupancy would not allow STACK to provide the critical electricity that would be needed during an emergency. It is important to note that in addition to the electricity that is directly consumed by the servers themselves, the largest load of the data center is related to cooling the rooms where the servers are located. In order for the servers to reliably function, they must be kept within temperature tolerance ranges. The industry standard is to design and operate a building that can meet those ranges even during a loss of electricity provided by the existing electrical service provider. Therefore, in order for STACK to provide the reliability required by its clients it was necessary to provide a backup generating system that could meet the maximum load of the SVY03A Campus during full occupancy and include redundancy as described in Section 2.2.3. A reduced capacity system would not fulfill the basic project objectives of the SVY03BGF.

8.3 Backup Electric Generation Technology Alternatives

STACK considered using potentially available alternative technologies: gas-fired turbines; flywheels; gas-fired reciprocating internal combustion engines, batteries; fuel cells; and alternative fuels. As discussed below, none of the technologies considered could meet the overall project objectives because they were commercially or technically infeasible and/or would not meet the necessary standard of reliability during an emergency.

8.3.1 Flywheels

Flywheel energy storage systems use electric energy input which is stored in the form of kinetic energy. Kinetic energy can be described as “energy of motion,” in this case the motion of a spinning mass, called a rotor. The rotor spins in a nearly frictionless enclosure. When short-term backup

power is required because utility power fluctuates or is lost, the inertia allows the rotor to continue spinning and the resulting kinetic energy is converted to electricity.

STACK has concluded that flywheel technology would not be a viable option and could not meet the project objectives for the following reasons:

- Flywheel technology does not perform within the required reliability levels of SVY03A Campus and is prone to system failure.
- Flywheel technology requires an extensive amount of maintenance to keep each energy storage system functioning.
- Flywheel systems cannot provide sufficient time duration (e.g. 24 hours or more) as a backup generation as the fly wheel motion can typically only sustain 10-30sec outages at a time.

8.3.2 Gas-Fired Turbines

STACK considered using natural gas-fired turbines instead of diesel generators to supply backup power for the SVY03A Campus. This technology option was rejected because it would not meet the project objectives. Natural gas turbines have the advantage of better emission of NOx and CO than diesel. However, as an emergency backup choice, it has the following deficiencies:

1. The gas infrastructure is more likely to have curtailment of the natural gas supplies during natural disasters and other emergency loss of utility power.
2. Onsite storage or delivery of natural gas to address the curtailment issues during an emergency is impossible to support long duration of backup (24 hours or longer time) due to the volume required.
3. The natural gas turbine is better suited for continuous operation instead of standby mode, which makes maintenance challenging.
4. The natural gas turbine needs minimum loads (30%), so additional load banks are required on site, leading to the change of design in terms of reliability and the use of more fuel than is necessary and leading to the wasting of electricity through the load bank.
5. Typical turbine engines have larger system sizes (4MW-50MW), while the smaller ones such as micro-turbines of 2.5MW will use twice the physical footprint and cost twice as much as the proposed generation technology.

Therefore, natural gas turbines are not considered reliable enough to meet the extremely high reliability requirements of a mission critical data center like the SVY03A Campus. A fixed fuel source such as a natural gas pipeline introduces another potential point of failure or load curtailment. Taking into account the natural gas outages from maintenance and repair by the utility, interruption due to construction accidents within the system, long-term damage and interruption during an earthquake, or outages caused by problems within the greater distribution system are higher probability occurrences than being able to obtain diesel fuel for longer than 24 hour outages. Therefore, this alternative was rejected as not being able to meet the project objectives.

8.3.3 Gas-Fired Reciprocating Engines

.STACK considered using natural gas-fired reciprocating engines instead of diesel generators to supply emergency backup power for the SVY03A Campus. This technology option was rejected because it would not meet the project objectives. While natural gas engines could achieve start up times sufficient to work with the UPS systems design and there are 2.5MW/3.1MW engines available, this technology lacks sufficient resilience to accept large block transfer of load associated with restart sequences when transferring from utility grid to backup generation. Therefore, natural gas reciprocating engines are not considered technically feasible or reliable enough to meet the industry standard or needs of the SVY03A Campus. As discussed above, storage of sufficient natural gas on site to maintain emergency backup electricity demands of the SVY03A Campus during an outage would not be tenable given the volume of natural gas that would be required.

8.3.4 Battery Storage

STACK considered using batteries alone as a source of emergency backup power. The primary reason batteries alone were rejected was the limited duration of battery power. Batteries can provide power quickly, which is the reason STACK has incorporated them into the overall backup electrical system design through the use of the UPS. As described in Section 2.2.4.2, batteries in the UPS System would be initiated at the first sign of electricity interruption. However, the current state of battery technology does not allow for very long durations of discharge at building loads as high as planned for the SVY03 Campus. Maximum discharging time is about 5 hours when doubled up from one ISO container to two, which needs more physical space. In addition, Lithium-ion batteries have more restrictive California fire code regulations. Renewable non-Lithium-ion battery such as ZnMnO2 is not commercially feasible for data centers yet. Once the standalone batteries are completely discharged, the only way they can be recharged without onsite generation is if the utility electrical system is back up and running. Since it is not possible to predict the duration of an electricity outage, batteries are not a viable option for emergency electrical power. Therefore, because battery storage cannot provide the duration that may be necessary during an emergency, this technology option was rejected as technically and commercially infeasible and unable to allow the SVY03A Campus to meet its project objectives.

The proposed diesel generators provide 24 hours of backup electricity without the need for refueling. In order to provide for the same 24 hour capacity, approximately 10 ISO containers representing approximately 10 times the amount of real estate would be required. The site will not accommodate the amount of batteries necessary.

8.3.5 Fuel Cells – Backup Replacement

STACK is very familiar with fuel cell technology as it has considered fuel cells at its current data centers. Fuel cells can provide both primary and off grid power. The fuel cells utilized by Bloom Energy and others are solid Oxide Fuel Cells (SOFC) that operate in high temperature of 750 Deg C, they need to stay hot to provide power. As a choice of backup, fuel cells need to run continuously in dual modes, as a primary source, or a standby mode when the grid is off (islanding mode). The fuel

cells have additional ultra-capacitors to cope with the 10-20 second load transfer time to match up with diesel generation technology.

The fuel cell has the following technical issues that negatively affect its ability to utilized as an emergency backup generation option.

1. It needs to run continuously to provide base load electricity to stay hot. This is why large data centers (Equinix, Apple, Yahoo) use Bloom Energy as primary source and maintain their existing emergency diesel generation fleet as backup.
2. .Fuel cells require approximately 3 times more space than the emergency generators proposed for the SVY03ABGF and stacking is challenging and difficult and expensive to design to applicable codes.
3. Fuel cells rely on the natural gas as feed stock, so the issues with natural gas infrastructure and onsite storage described above also limit reliability.

There are fuel cell technologies (Proton Exchange Membrane) that utilize liquid hydrogen as a fuel. This type of fuel cell is mostly used for mobile sources and can start cold quicker similar to a combustion engine. STACK understands that there are pilot programs to scale this type of fuel cell to larger sizes. However, the issues that affect the project objectives of this technology include:

1. The technology is not yet commercially available at sizes necessary for a large data center.
2. The footprint is projected to be about twice the size of the proposed emergency generators.
3. Onsite storage of 24 hours of liquid hydrogen will take significant additional space not available at the site.
4. The potential for on-site and offsite impacts of a large release of liquid hydrogen which would be stored at pressure (6000 PSI) at the project site would be likely unacceptable within the City of Hayward.

8.3.6 Fuel Cells – Primary Generation/Grid Backup

STACK has evaluated generating primary electricity with fuel cells on-site and relying on the electricity grid for emergency backup electricity. One example of primary power is that Equinix has partnered with Bloom Energy over the last 5 years to deploy over 45 MW of fuel cell technology at various sites around the country using fuel cells as base load. There are other sites, such as Home Depot where Bloom Energy fuel cells provide primary electricity. However, we are unaware of any data center fuel cell application where fuel cells provide the full electricity needs for the data center without the bulk of the primary power being delivered by a utility.

There are two primary reasons that this solution cannot achieve the SVY03A Campus project objectives. The first is that it is unlikely that PG&E would procure and reserve the amount of electricity necessary to power the SVY03A Campus in perpetuity as a backup source on a moment's notice. The magnitude of electricity for such an event after full buildout of the SVY03A Campus would render such an option infeasible.

As currently designed, the SVY03BGF will provide a N+1 protection scheme for the SVY03A Campus. In other words, the primary electricity will be provided by the extremely reliable PG&E electric system and if that system fails, the diesel-fired emergency generators would provide the electricity that the SVY03A Campus requires. Utilizing fuel cells as the primary generation and relying on the grid as backup in the event or fuel cell failure would also provide a N+1 protection scheme. However, this alternative would provide lower reliability during an earthquake - the design natural disaster for California projects. During an earthquake, it is possible that the natural gas system cannot deliver the fuel to the fuel cells at the same time that the PG&E electrical system is experiencing an outage. In that case, in order to provide the same reliability as the proposed design, emergency backup generators would still be necessary (N+2) to provide electricity to the SVY03A Campus during the design natural disaster case. Therefore, in order to have the same reliability, the same number and size of emergency backup generators would be required.
Therefore, use of fuel cells as primary generation would not replace the proposed emergency backup generators in order to meet the project objectives.

Section 9.0 References

The analysis in this Environmental Impact Report is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-2 HWD and OAK Influence Area Overlap.

Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-3 HWD Noise Compatibility Zones and Figure 3-4 HWD Safety Compatibility Zones.

Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-1 Airport Influence Area.

Alameda County Community Development Agency. *Hayward Executive Airport Airport Land Use Compatibility Plan*. August 2012. Figure 3-3 HWD Noise Compatibility Zones and Figure 3-4 HWD Safety Compatibility Zones.

Alameda County Flood Control & Water Conservation District. "Interactive Map: Alameda County Watersheds." Accessed August 14, 2023. https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds

Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

Association of Bay Area Governments. "Projections 2040." Accessed March 15, 2023. http://projections.planbayarea.org/.

CAL FIRE. CAL FIRE Santa Clara Unit Strategic Fire Plan. May 8, 2022. https://osfm.fire.ca.gov/media/hjndvue2/2022-santa-clara-contra-costa-alameda-west-stanislaus-west-sann-joaquin-unit-fire-plan.pdf

CalEEMod' s Appendix G Default Data Tables, dated 2022.

California Air Resources Board. "Advanced Clean Cars II." Accessed September 7, 2023. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii

California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed July 10, 2023. https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

California Board of Forestry and Fire Protection. *SRA FHSZ Rollout Application*. November 21, 2022. Accessed July 26, 2023. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=fd937aba2b044c3484a642ae03c35677.

California Building Standards Commission. "California Building Standards Code." Accessed September 7, 2023. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

California Department of Conservation, *Alameda County Important Farmland Map 2018.* https://www.conservation.ca.gov/dlrp/fmmp/Pages/Alameda.aspx

California Department of Conservation. California Tsunami Maps and Data. Accessed August 21, 2023. https://www.conservation.ca.gov/cgs/tsunami/maps

California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2021-2022, http://dq.cde.ca.gov/dataquest/

California Department of Education. GIS Mapping, School District Layer. Accessed September 8, 2023.

California Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State. 2021-2022 with 2020 Census Benchmark. Accessed March 15, 2023. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/

California Department of Fish and Wildlife. "Eden Landing Ecological Reserve." Accessed July 19, 2023. https://wildlife.ca.gov/lands/places-to-visit/eden-landing-er#10541121-restoration.

California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed July 12, 2023. http://frap.fire.ca.gov/.

California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed March 15, 2023. http://hcd.ca.gov/community-development/housing-element/index.shtml.

California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed September 7, 2023. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

California Department of Toxic Substances Control. "EnviroStor." Accessed July 26, 2023. https://www.envirostor.dtsc.ca.gov/public/.

California Energy Commission. Energy Consumption Data Management System. "Electricity

Consumption by County." Accessed September 7, 2023. http://ecdms.energy.ca.gov/elecbycounty.aspx.

California Energy Commission (CEC). "2022 Building Energy Efficiency Standards." Accessed September 7, 2023. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Energy Commission. "Natural Gas Consumption by County." Accessed September 7, 2023. http://ecdms.energy.ca.gov/gasbycounty.aspx.

California Energy Commission. "Renewables Portfolio Standard – Verification and Compliance." Accessed September 7, 2023. https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard/renewables-portfolio-standard

California Energy Commission. *Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast*. February 17, 2022. Page 21. file:///C:/Users/mmcnamara/Downloads/TN241581_20220217T142233_ADOPTED%20Final%202021%20Integrated%20Energy%20Policy%20Report%20%20Volume%20IV%20California%20En.pdf

California Environmental Protection Agency. "Cortese List Data Resources." Accessed May 28, 2020. https://calepa.ca.gov/sitecleanup/corteselist/.

California Environmental Protection Agency. Cortese List Data Resources. Accessed February 16, 2023. https://calepa.ca.gov/sitecleanup/corteselist/

California Gas and Electric Utilities. *2022 California Gas Report*. 2022.

California Geological Survey. GIS Map. Accessed September 7, 2023. https://maps.conservation.ca.gov/cgs/DataViewer/

California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

California Public Resources Code Section 12220(g)

California Public Resources Code Section 4526)

California 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.

California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed August 16, 2023. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

CalRecycle. "Altamont Landfill & Resource Recovery (01-AA-0009)." Accessed August 30, 2023. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7

CalRecycle. Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. August 18, 2020. https://www2.calrecycle.ca.gov/Publications/Details/1693#:~:text=Analysis%20of%20the%20Progress%20Toward,(DRRR%2D2020%2D1693)&text=SB%201383%20establishes%20targets%20to,75%20percent%20reduction%20by%202025.

City of Hayward. "City of Hayward Zoning." August 22, 2019. Accessed July 19, 2023. https://opendata.hayward-ca.gov/documents/Hayward::hayward-zoning-pdf-map-42x70-190627/explore.

City of Hayward. "Development Explorer." Accessed July 7, 2023.

City of Hayward. "Garbage and Recycling." Accessed September 1, 2023. https://www.hayward-ca.gov/yourenvironment/green-your-community/garbage-and-recycling

City of Hayward. *Hayward 2040 General Plan Background Report.* January 2014. Page 9-2.
East Bay Community Energy. "Power Mix." Accessed September 7, 2023. https://ebce.org/our-power-mix/index.html/

City of Hayward. "Hayward Recycled Water Project." Accessed August 14, 2023. https://www.hayward-ca.gov/your-government/departments/utilities-environmental-services/recycled-water.

City of Hayward. *2020 Urban Water Management Plan.* July 2021.

City of Hayward. *Hayward 2040 General Plan Background Report.* January 2014.

City of Hayward. *Hayward 2040 General Plan Draft EIR*. January 30, 2014. Page 13-1.

City of Hayward. *Hayward 2040 General Plan Policy Document Figure LU-1 Land Use Diagram.* July 2014.

City of Hayward. Reduce, Reuse, Recycle, Rot. Accessed June 28, 2023. https://www.hayward-ca.gov/your-environment/green-your-life/reduce-reuse-recycle-rot

City of Hayward. *The City of Hayward 2020 Urban Water Management Plan*. July 2021. Page 89.

Cornerstone Earth Group. *Preliminary Geotechnical Investigation, Eden Landing Business Park Redevelopment.* August 4, 2022.

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. https://www.hayward-ca.gov/sites/default/files/Draft%20C%26E%20Plan_022718.pdf

Federal Emergency Management Agency (FEMA). Flood Rate Insurance Map 06001C0288G. Effective August 3, 2009.

FEMA. "Zone C or X (Unshaded)." Accessed August 21, 2023. https://www.fema.gov/glossary/zone-c-or-x-unshaded#:~:text=Area%20of%20minimal%20flood%20hazard,or%20designation%20as%20base%20floodplain.

Google Earth. September 7, 2023.

Government Code Section 51104(g)

Hayward Area Recreation and Park District. "Community Centers." Accessed August 11, 2023. https://www.haywardrec.org/130/Community-Centers.

Hayward Fire Department. "Stations." Accessed August 9, 2023. https://www.hayward-ca.gov/fire-department/stations

Hayward Police Department. "Divisions." Accessed August 9, 2023. https://www.hayward-ca.gov/police-department/about

Hayward Unified School District. "School Locator." Accessed August 11, 2023. https://portal.schoolsitelocator.com/apps/ssl/?districtcode=41834.

ITE Trip Generation Handbook, 10th edition.

States Fish and Wildlife Service. "National Wetlands Inventory." Accessed July 19, 2023. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

State Water Resources Control Board. "GeoTracker." Accessed July 26, 2023. https://geotracker.waterboards.ca.gov/.

U.S. Energy Information Administration. “Petroleum & Other Liquids, California Field Production of Crude Oil.” February 28, 2023. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=a

U.S. Energy Information Administration. California State Energy Profile. Accessed September 8, 2023. https://www.eia.gov/state/print.php?sid=CA#77

United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed September 7, 2023. http://www.afdc.energy.gov/laws/eisa.

United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026.” Accessed September 7, 2023. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026

United States Energy Information Administration. “Natural Gas Consumption by End Use. 2021.” Accessed September 7, 2023. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Energy Information Administration. “State Profile and Energy Estimates, 2021.” Accessed August 1, 2023. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency. “EPA Actions to Protect the Public from Exposure to Asbestos.” Accessed April 19, 2022. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos

United States Environmental Protection Agency. “Summary of the Resource Conservation and Recovery Act.” Accessed May 11, 2020. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

United States Environmental Protection Agency. “Superfund: CERCLA Overview.” Accessed May 11, 2020. https://www.epa.gov/superfund/superfund-cercla-overview.

United States Environmental Protection Agency. “The 2022 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975.” December 2022. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf

United States Fish and Wildlife Service. “National Wetlands Inventory.” Accessed July 19, 2023. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

Uptime Institute. Annual Data Center Survey Results - 2019. Available at: https://datacenter.com/wp-content/uploads/2019/06/data-center-survey-2019.pdf

WM. “Altamont Landfill.” Accessed August 30, 2023. https://altamontlandfill.wm.com/index.jsp

WM. “Sustainability.” Accessed August 30, 2023. https://altamontlandfill.wm.com/sustainability/index.jsp#:~:text=As%20a%20result%2C%20the%20Altamont,the%20management%20of%20discarded%20materials.

Working Group on California Earthquake Probabilities. “Uniform California Earthquake Rupture Forecast (Version 3).” Accessed September 7, 2023. http://wgcep.org/

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Section 11.0 Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
ATCM	Asbestos Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
Btu	British Thermal Unit
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide

CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DNL	Day/Night Average Sound Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gases
GHGRS	Greenhouse Gas Reduction Strategy
GWh	Gigawatt Hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HSWA	Hazardous and Solid Waste Amendments
L_{eq}	Energy-Equivalent Sound/Noise Descriptor
L_{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
MND	Mitigated Negative Declaration
mpg	Miles per Gallon
MSL	Mean Sea Level

MTC	Metropolitan Transportation Commission
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOD	Notice of Determination
NO_x	Nitrogen Oxides
NRHP	National Register of Historic Places
O_3	Ozone
PCB	Polychlorinated Biphenyls
PCF	Perfluorocarbon
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM_{10}	Particulate matter with a diameter of 10 microns or less
$PM_{2.5}$	Particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
R&D	Research and Development
RAP	Removal Action Plan
RCRA	Resource Conservation and Recovery Act
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	State Bill
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act

SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO_x	Sulfur Oxides
SR	State Route
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	Vehicle Miles Traveled
Williamson Act	California Land Conservation Act
WUI	Wildland-Urban Interface
ZNE	Zero Net Carbon Emission