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All appendices are incorporated herein by reference.

Section 1.0 Introduction and Purpose

1.1 Executive Summary

LBA RVI-Company I, LP hereby files this Application for a Small Power Plant Exemption (SPPE Application) pursuant to Public Resources Code Section 25541 and Section 1934 et seq. of the California Energy Commission (Commission) regulations for the 97.3 megawatt (MW)¹ NorthTown Backup Generating Facility (NTBGF). The NTBGF will consist of a total of 42 diesel-fired generators that will be used exclusively to provide up to 97.3-MW of backup emergency generation to support the NorthTown Data Center (NTDC). The NTDC will consist of two data center buildings designated DC North and DC West and will be located within an existing developed property located on the property associated with 350 and 370 West Trimble Road in San Jose, California. Specific physical addresses for DC North and DC West will not be assigned by the City of San José until the building permit process and thus will not be known for the SPPE.

Of the 42 generators, 40 of the generators will each have a capacity of 3 MW and will provide backup of the electricity needs of the data center's critical operations. Of those 40 data center generators rated 3 MW, a total of eight generators will be redundant. The two remaining generators (out of the total 42 generators) will each have a capacity of up to 1.75 MW and will be used to support general office loads along with building and life safety services for each data center building during an emergency outage (i.e., house generators).

Unlike the typical electrical generating facility reviewed by the Commission, the NTBGF will be designed to operate only when electricity from the Pacific Gas & Electric Company (PG&E) is unavailable to the NTDC. The NTBGF will not be electrically interconnected to the electrical transmission grid. Rather, it will consist of two generation yards, each electrically interconnected solely to the data center building (DC North or DC West) that it supports.

Section 2 of the SPPE Application provides project information such as the project title, lead agency contact, project applicant, project location, assessor's parcel number, and general plan and zoning designations.

Section 3 of the SPPE Application provides a detailed description of the construction and proposed operation of the NTBGF. To describe the context of the NTBGF and its role in serving the NTDC, Section 2 also includes a general description of the NTDC.

Section 4 of the SPPE Application includes environmental information and analyses in sufficient detail to allow the Commission to conduct an Environmental Impact Report or Mitigated Negative Declaration consistent with the California Environmental Quality Act (CEQA) Guidelines.

¹ Maximum electrical demand of the NTDC.

Section 5 of the SPPE Application includes a discussion of Alternative backup generation configurations, technology, and alternative fuels considered by the Project Applicant.

Section 6 of the SPPE Application contains a list of applicable agencies and contact information that have jurisdiction over laws, ordinances, regulations, and standards (LORS) that may be applicable to the NTBGF as required by Subsection (i) of Appendix F of the Commission Regulations.

Section 7 of the SPPE Application contains a list of addresses of properties and addresses of property owners (where different from the site address) within 1,000 feet of the Project Site and 500 feet of off-site linear facilities for Commission noticing purposes.

Section 8 provides a list of those who assisted in the preparation of this SPPE Application.

Section 9 provides a list of acronyms used in this SPPE Application.

1.2 Project Objectives

The primary goal of the NTDC is to be a state-of-the-art data center campus that provides greater than 99.999 percent availability. The NTDC has been designed to reliably meet the increasing requirements of the digital economy, its customers, as well as the growing demands of cloud computing and artificial intelligence (AI) applications. The NTDC's purpose is to provide its customers with mission critical space to support their servers, including space conditioning and a steady stream of high-quality power supply. Interruptions and poor power quality could lead to computer equipment damage or corruption of the data and software stored on the servers by LBA RVI-Company I, LP's clients. The NTDC will be supplied electricity by PG&E through an expansion of a recently permitted PG&E switching station adjacent to the NTDC site. The switching station will be owned and operated by PG&E (i.e., PG&E Switching Station Expansion). The NTDC will include a substation that will be owned and operated by LBA RVI-Company I, LP (i.e., Project Substation). The Project Substation will be located immediately adjacent to the PG&E Switching Station.

To ensure a reliable supply of high-quality power, the NTBGF was designed to provide electricity to the NTDC only in the event electricity cannot be supplied from PG&E and delivered to the NTDC campus. To ensure no interruption of electricity service to the servers housed in the NTDC buildings, the servers will be connected to uninterruptible power supply (UPS) systems that provide instantaneous protection from input power interruptions and frequency fluctuations. 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 NTBGF provides that backup power generation source.

The NTDC's Project Objectives are as follows:

- Develop a state-of-the-art data center large enough to meet the increased intensity of data processing, computational power, and energy demands from the projected growth of cloud computing and AI applications;
- Develop the NTDC on land that is currently zoned to permit a data center use at the subject location and that is acceptable to City of San José;
- Incorporate the most reliable and flexible form of backup electric generating technology into the NTBGF considering the following evaluation criteria.
 - o **Reliability**. The selected backup electric generation technology must be extremely reliable in case of an emergency loss of electricity from the utility.
 - The NTBGF must provide a higher availability than 99.999 percent in order for the NTDC to achieve an overall reliability of equal to or greater than 99.999 percent availability at the critical load.
 - The NTBGF must provide reliability to the greatest extent feasible during natural disasters including earthquakes.
 - The selected backup electric generation technology must have a proven built-in resiliency so if any backup unit fails due to external or internal failure, the system will have redundancy to continue to operate without interruption.
 - The NTDC must have on-site means to sustain power for 24-hours minimum in failure mode, inclusive of utility outage.
 - o **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 able to be permitted and operational within a reasonable timeframe.
 - o **Technical Feasibility**. The selected backup electric generation technology must utilize systems that are compatible with one another.

1.3 Commission SPPE Jurisdiction

LBA RVI-Company I, LP acknowledges that the Commission’s authorizing statute grants exclusive authority for the Commission to issue licenses for the construction and operation of thermal power plants with generating capacities in excess of 50 MW.² For thermal power plants with generating capacities greater than 50 MW but less than 100 MW, the Commission can grant an exemption from its licensing authority³. The NTBGF will not be a typical power generating facility in that it consists of generators that can operate independently. In addition, the generators will be arranged to support individual portions of the buildings within the NTDC. None of the generators will be

² Public Resources Code (PRC) Section 25500.

³ PRC Section 25541 and Title 20 California Code of Regulations (CCR) Section 1934.

interconnected to the electrical transmission system; therefore, no electricity can be delivered off-site.⁴

1.3.1 Data Center Facilities Not Within Scope of SPPE

The NTDC is not within the scope of the Commission's sitting jurisdiction because it is not a thermal power plant. The NTDC is the sole consumer of the electricity produced by the NTBGF. LBA RVI-Company I, LP is submitting required development applications to construct and operate the NTDC to the City of San José for review. The City commenced its Preliminary Review in September 2024. The Project will require the following permits from the City: a Conditional Use Permit (for DC West, PG&E Switching Station, and Project Substation) and a Planned Development Permit (for DC North).

LBA RVI-Company I, LP believes that although the Commission is the lead agency for making a determination of whether the NTBGF is a thermal power plant that can qualify for a SPPE, the ultimate decision does not extend to the NTDC facilities. LBA RVI-Company I, LP does acknowledge that the Commission should include the potential effects of the NTDC in its analysis prepared as lead agency for CEQA, but the ultimate determination of whether the NTDC should be approved, denied, or subject to mitigation measures is solely within the City's jurisdiction. To assist the Commission in preparing its CEQA document, LBA RVI-Company I, LP includes a description of the NTDC and its supporting facilities in addition to the NTBGF in Section 3.0 Project Description. The potential effects of the NTDC are considered in environmental analyses in Section 4.0 Environmental Setting, Checklist, and Impact Discussion to assist the Commission in evaluating combined impacts from the co-location of the NTBGF and the NTDC. As demonstrated in Section 4.0 Environmental Setting, Impacts, and Mitigation, neither the NTBGF nor the NTDC, would result in significant environmental impacts with the Project Design Measures (PDMs) proposed in this SPPE Application. Therefore, we believe the Commission's CEQA document should heavily rely on the analyses contained herein, and the PDMs, to expeditiously prepare an Initial Study that incorporates the PDMs as mitigation measures.

To enable the City to timely complete its review of the NTDC, LBA RVI-Company I, LP requests the Commission complete its review of the NTBGF within the Commission's statutory 135-day obligation or no later than December 2025.

1.4 Project Benefits and Efficiency Measures

The NTDC provides much needed data center infrastructure to support an increasing shift towards digital technologies and data-driven society. The NTDC has been designed to:

⁴ The Commission Staff has determined that notwithstanding these facts, the Commission has jurisdiction over the NTBGF as a thermal power plant. LBA RVI-Company I, LP reserves all its rights regarding whether or not the Commission has jurisdiction over the NTBGF and the filing of this SPPE Application is not an admission by LBA RVI-Company I, LP that the Commission has exclusive jurisdiction over either the NTBGF or the NTDC.

- Minimize water usage by utilizing closed loop cooling water system with hybrid cooling towers that utilize recycled water.
- Use renewable fuel as the primary fuel source for the backup generators, such as Hydrogenated (or Hydrotreated) Vegetable Oil (HVO), but the generators will also be capable of running on traditional diesel fuel.
- Minimize pollutant emissions concentrations by performing generator maintenance on one generator at a time;
- Operate the backup generators only when there is an interruption of utility service to the site and not for demand response or other grid-related purposes;
- Incorporate noise minimization measures;
- Incorporate energy and water efficiency measures;
- Incorporate Storm Water Low Impact Design (LID) methodologies to capture and treat all runoff from proposed impervious surfaces per local standards; and
- Implement Leadership in Energy and Environmental Design (LEED) and other US Green Building Council (USGBC) design and construction methodologies

Due to the heat generated by the data center equipment, cooling is one of the main uses of electricity in data center operations. In order to reduce greenhouse gas (GHG) emissions and reduce the use of energy related to building operations, the Project proposes to implement the following efficiency measure:

- Daylight penetration to offices
- LED lighting fixtures and occupancy sensors
- Reflective roof surface
- Meet or exceed Title 24 requirements
- Electric vehicle (EV) parking
- Low flow plumbing fixtures
- Landscaping will meet City requirements for low water use
- Use a low GHG emission refrigerant in the Project chillers
- Use of high efficiency critical electrical equipment
- Use of high efficiency HVAC equipment with economization feature

Section 2.0 Project Information

2.1 Project Title

NorthTown Data Center (NTDC) Project

2.2 Lead Agency Contact

Lisa Worrall
Project Manager
Siting, Transmission and Environmental Protection (STEP) Division
California Energy Commission
715 P Street
Sacramento, CA 95814
Phone: 916-661-8367
Email: Lisa.Worrall@energy.ca.gov

2.3 Project Applicant

LBA RVI-Company I, LP c/o LBA Realty
3347 Michelson Drive, Suite 200
Irvine, CA 92612
Attn: Anthony Calderone

2.4 Project Location

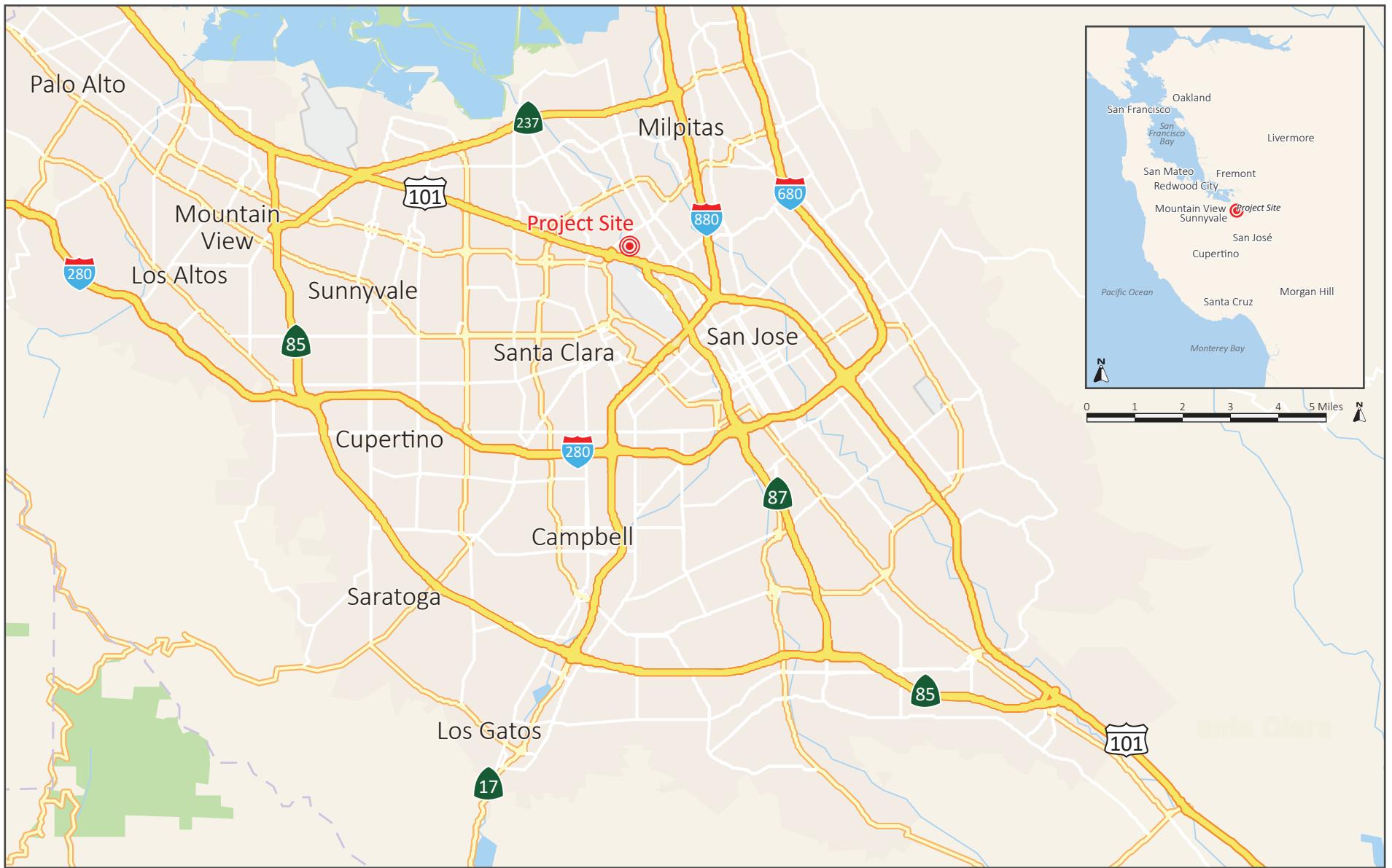
The approximately 28.5-acre Project Site, which includes DC North and DC West, is located at the southwestern corner of the West Trimble Road and Orchard Parkway intersection. The Project Site is associated with property at 350 and 370 West Trimble Road in San José, California. Refer to Figure 2-1, Figure 2-2, and Figure 2-3 for the Regional, Vicinity, and Aerial maps, respectively.

2.5 Assessor's Parcel Number

101-02-018 and 101-02-021

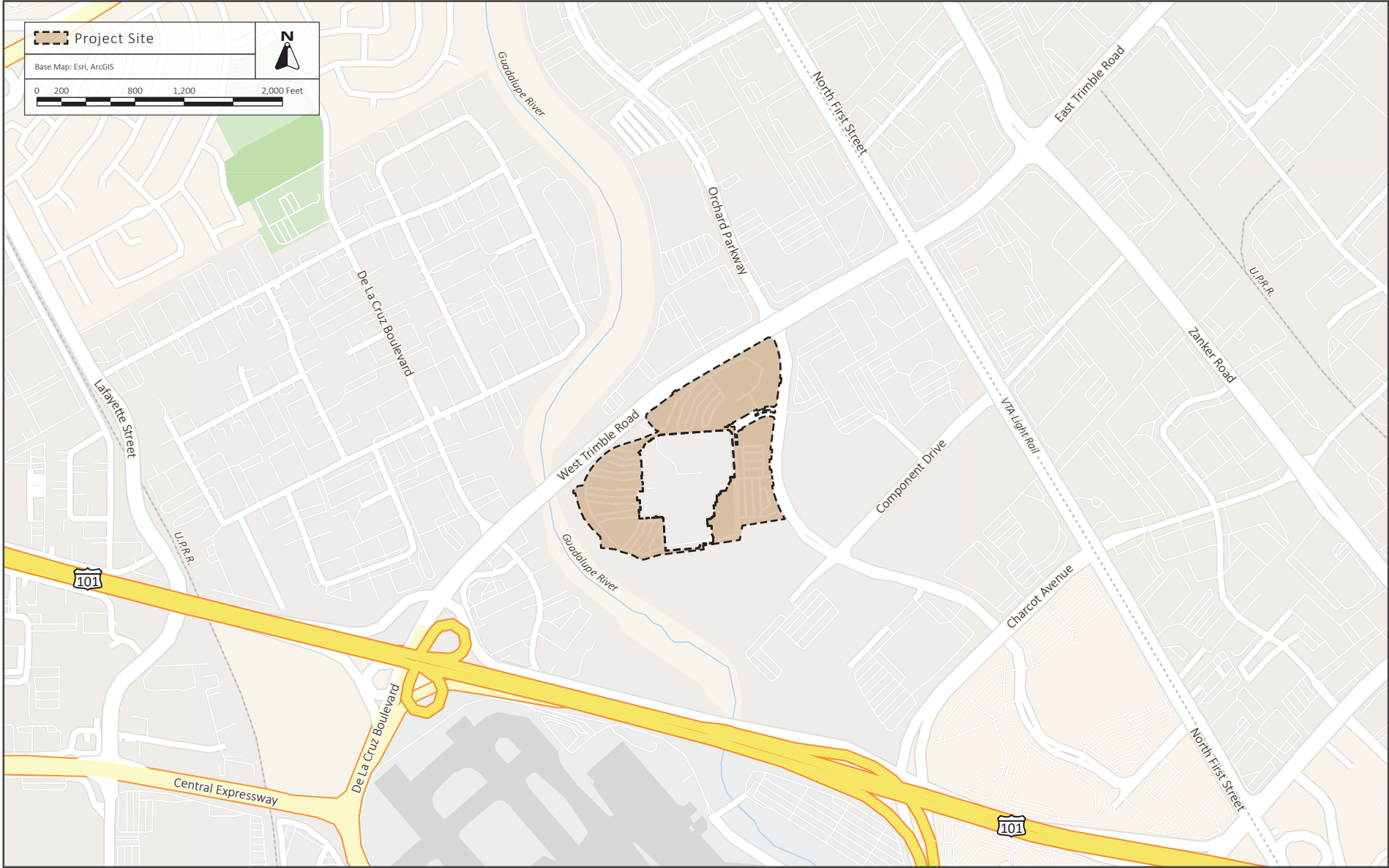
2.6 General Plan Designation and Zoning District

General Plan Designation:	Combined Industrial/Commercial and Industrial Park
Zoning District:	Combined Industrial/Commercial and Industrial Park Planned Development



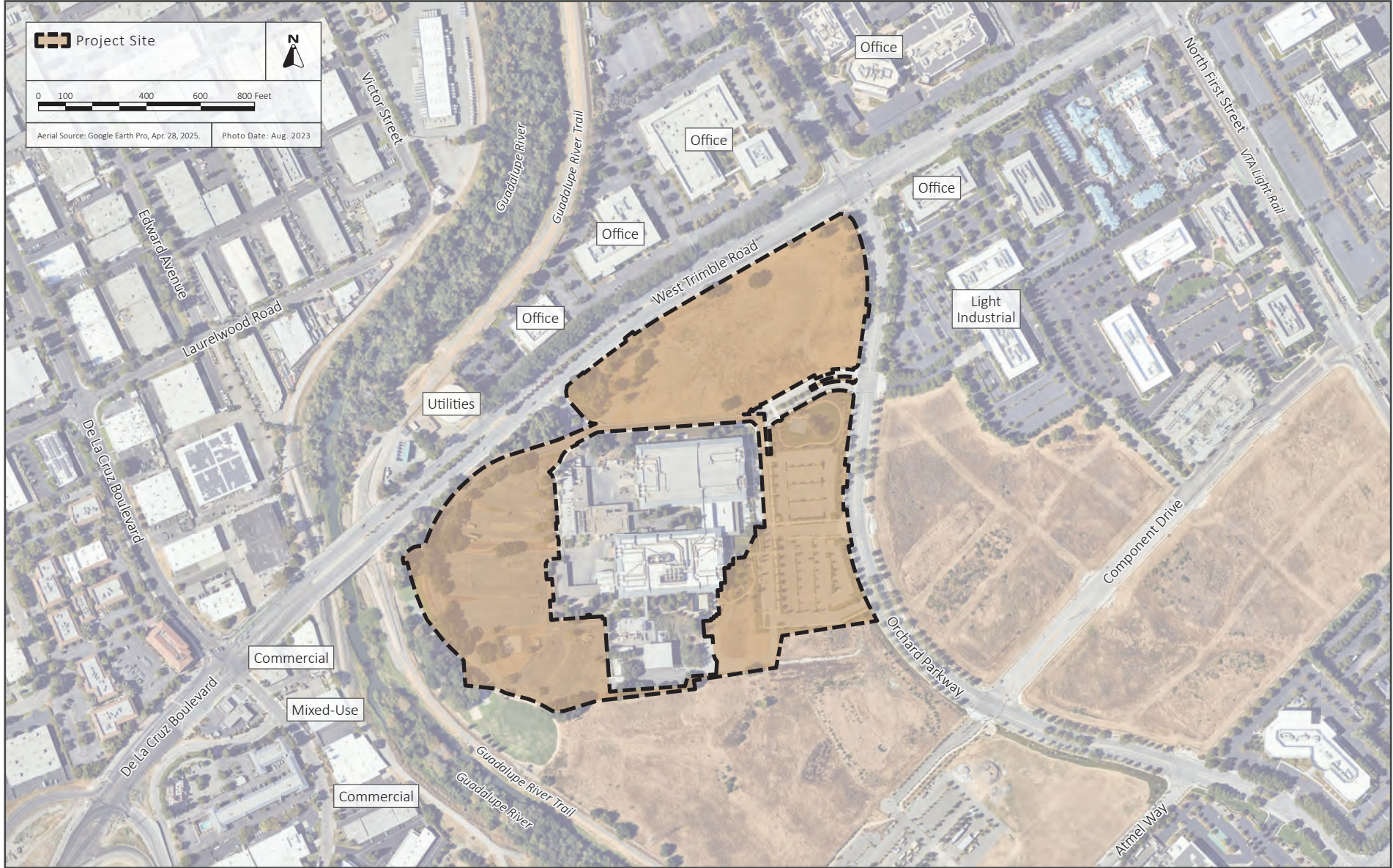
REGIONAL MAP

FIGURE 2-1



VICINITY MAP

FIGURE 2-2



AERIAL AND SURROUNDING LAND USE MAP

FIGURE 2-3

Section 3.0 Project Description

3.1 Overview of Proposed Generating Facilities

NTBGF will be an emergency backup generating facility with a generation capacity of up to 97.3 MW to support the need for the NTDC to provide clean uninterrupted power for its tenant's servers. The NTBGF will consist of 42 diesel-fired backup generators. Of the 42 total generators, two of the generators will each have a generating capacity of up to 1.75 MW and the remaining 40 generators will each have a generating capacity of 3 MW. Of those 40 generators rated 3 MW, eight will be redundant. The generators will be arranged in two generation yards located adjacent to each data center building (DC North and DC West). All 40 of the 3-MW generators will be dedicated to replacing the electricity needs of the data center in case of a loss of utility power, while the two 1.75-MW generators will be used to support general office loads along with building and life safety services (i.e., house generators) during emergencies.

3.2 Generating Facility Description, Construction and Operation

3.2.1 Site Description

The Project Site is located at the southwest corner of the intersection of West Trimble Road and Orchard Parkway in San José, California. The data center buildings, emergency backup generating facilities, Project substation, water storage and treatment area, the PG&E Switching Station, site circulation, and parking will be located on APNs 101-02-018 and 101-02-021, (hereinafter referred to as the "Project Site"). The entire Project Site is approximately 28.5 acres.

The Project Site has two General Plan land use designations of Combined Industrial/Commercial (CIC) and Industrial Park (IP). The Project Site also is located in two zoning districts, the CIC zoning district and IP Planned Development (PD) zoning district. DC North sits within the IP(PD) zoning district while DC West, the Project Substation and the PG&E Switching Station sit within the CIC zoning district. The majority of the Project Site is currently developed with circulation and landscaped areas that surround an existing industrial facility. A portion of the Project Site associated with DC North was cleared and graded in 2022 in preparation for a previous advanced manufacturing project that did not move forward.

The Project Site is generally bound to the north by West Trimble Road, to the south by an undeveloped property planned for future development as an unrelated data center facility, to the east by Orchard Parkway, and to the west by the Guadalupe Trail and Guadalupe River. As the Project is primarily a redevelopment of an existing, operating industrial site, the portions of the existing industrial facilities to remain are not included in the definition of the Project Site. Given this, the Project Site is irregularly shaped and only includes the general development areas for DC

North and DC West and their associated functions, the Project substation, the PG&E Switching Station and limited modifications to existing site circulation and parking affected by the site's redevelopment. The overall site plan is shown in Sheet Index P 2.0 in Appendix A.

Parcels near the Project Site consist primarily of industrial land uses to the north, east and south. Uses to the west include industrial and limited commercial uses across the Guadalupe River. US-101 is approximately 1,100 feet southwest of the Project Site, and the San José Mineta International Airport is approximately 1,350 feet southwest of the Project Site at the nearest point. The closest school (Montague Elementary School) is approximately 0.7 mile northwest of the Project Site. The nearest residential area (consisting of single-family residences) is approximately 0.6 mile northwest of the Project Site.

Existing buildings in the vicinity of the Project Site to the north, south and east are similar in height and scale to the proposed data center buildings. The data center buildings would each be approximately 207,000 square feet with a maximum height of 81.4 feet at the top of the rooftop mechanical equipment.

Refer to Sheet Index P 6.0 in Appendix A for the DC North site plan and to Sheet Index P 5.0 in Appendix B for the DC West site plan.

3.2.2 General Site Arrangement and Layout

The 42 emergency backup generators (two 1.75-MW generators for house loads and 40 3-MW generators for the data center loads) will be located at the site in two generation yards adjacent to each of the two NTDC buildings. Refer to Sheet Index A 1.0 in Appendix A for the location of the generation yard adjacent to DC North and to Sheet Index A 1.0 in Appendix B for the location of the generation yard adjacent to DC West.

Each generation yard will be electrically connected to the data center building (DC North or DC West) through an underground cable bus system to a location within each building that houses electrical distribution equipment.

3.2.3 Generating Capacity

3.2.3.1 *Overview*

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

1. The NTBGF uses internal combustion engines and not turbines.
2. The NTBGF internal combustion engines have a peak rating and a continuous rating.

3. The NTBGF through software technology and electronic devices will be controlled exclusively by the NTDC. The NTBGF has been designed with a potential to be either a block redundant ($N+R=4+1$) or distributed redundant (5-to-make-4) system, as described below. Each data center floor will be served by two systems of five 3-MW data center generators each (as described in Section 3.2.4 Backup Electrical System Design below). Each floor will then be served by a total of 10 3-MW data center generators with a total of 20 3-MW data center generators per data center building (DC North and DC West). The entire data center campus will have a total of 40 3-MW generators.
4. For each building, there will be four 3-MW redundant data center generators which equates to eight redundant generators for the campus.
5. There will be a total of two 1.75-MW house generators (one for each data center building) to provide electricity during emergencies to support portions of the administrative building and features necessary for emergency response.
6. The NTBGF will only be operated for maintenance, testing, and during emergency utility power outages and will not operate for any demand response program.
7. The NTBGF will only operate at a load equal to the demand of the NTDC during an emergency utility outage.
8. The NTBGF will be only interconnected to the NTDC and will not be interconnected to the transmission or distribution grid.

3.2.3.2 *Generating Capacity and PUE*

The Commission has determined the maximum generating capacity of a backup generating facility is the maximum capacity of the load being served. The design demand of the NTDC, which the NTBGF has been designed to reliably supply with redundant components during an emergency, is based on the maximum critical information technology (IT) load and maximum mechanical cooling electrical load occurring during the hottest temperature in the last 20 years. Such conditions are possible but extremely unlikely to ever occur. The NTDC load on that worst-case day will be 97.3 MW.

It is important to understand that while the NTDC will be designed to accommodate the full IT equipment load of the building, it is LBA RVI-Company I, LP's experience that the customers who lease data center space do not utilize the entire load identified in their lease. This typically results in data center demand loads of approximately 85-90 percent. Therefore, a fully leased 97.3-MW data center will only be expected to reach a demand load of around 88 MW.

The data center industry utilizes a factor called the Power Utilization Efficiency Factor (PUE) to estimate the efficiency of its data centers. The PUE is calculated by dividing the total demand of the data center infrastructure serving the critical IT spaces (including IT load) by the critical IT load itself. The theoretical peak PUE for the Worst Day Calculation will be 1.5⁵. The average annual PUE at full

⁵ The Peak PUE is calculated as follows: Total 99 MW building demand power load on Worst Case Day divided by 64 MW total critical IT load

load will be 1.2.⁶ These PUE estimates are based on design assumptions and represent the worst case.

As described above, the expected PUE will be much lower because the Critical IT that is leased by clients is rarely fully utilized. LBA RVI-Company I, LP team members' experience with operation of other data centers is that the actual annualized PUE will be closer to 1.12.

3.2.4 Backup Electrical System Design

3.2.4.1 Overview

There will be up to eight data halls in the NTDC. Each data hall will be designed to handle up to 9 MW of IT equipment load. The total electrical load of each 9-MW data hall will be 12 MW which includes the IT equipment load, mechanical equipment to cool the IT equipment load, lighting, data center monitoring equipment, and other general use load. The sum of the eight data halls will result in 72 MW of IT equipment load and 97.3 MW of total electrical load. This total electrical load includes the worst cases of 3 MW of house load, 72 MW of IT equipment load, and 22 MW of mechanical load. The data halls for DC North are shown in Sheet Index A 1.0 and A 1.1 in Appendix A. The data halls for DC West are shown in Sheet Index A 1.0 and A 1.1 in Appendix B.

There will be 40 critical electrical lineups supporting the data centers, each consisting of a 2-MW UPS and a 3-MW generator. Of the 40 critical electrical lineups, there will be eight backup electrical systems and 32 primary electrical systems. All eight of the data halls will each be served by four primary electrical systems and one backup electrical system.

Each 9-MW data hall will be supported by five of the critical electrical lineups or generators. Each group of five of the critical electrical lineups will be designed for one lineup to be taken out of service at any moment in time (called "4+1" block or "5-to-make-4" distributed redundancy). During a utility outage, all five generators will start and carry load up to a design threshold of approximately 80 percent of their nameplate rating. If one of the generators fails or needs to be taken out of service during the emergency, the redundancy design allows the failing generator to be removed from operation automatically with the remaining four generators to continue to serve up to the maximum design load of the data hall.

The IT equipment will have dual cords that will take power from two different critical electrical lineups. The dual cords will be designed to evenly draw power from both cords when power is available on both cords, and automatically draw all of its power from a single cord when power becomes unavailable on the other cord.

⁶ The average annual PUE is calculated as follows: Total 80 MW building demand of average conditions divided by 64 MW Design Critical IT Load

Each “4+1” or “5-to-make-4” redundant critical electrical system will be designed to continue supporting all of the IT equipment load in the data hall it serves any time one of the five critical electrical lineups is either scheduled to be out-of-service for maintenance or becomes unavailable due to equipment or utility failure. Therefore, the 15 MW of total power equipment capacity installed for each redundant critical electrical system effectively provides only 12 MW of total power.

The electrical load on each “4+1” or “5-to-make-4” redundant critical electrical system will be monitored by the building automation system. When any of the redundant critical electrical systems reaches 90 percent of the normal operating load, an alarm is activated in the engineering office. The operations staff will work with the tenants to ensure that the facility's power levels will not be exceeded.

The consequence of a critical electrical lineup exceeding the design threshold load could lead to dropping IT equipment when coupled with a critical electrical lineup failure event. If all the critical electrical lineups serving a data hall will be loaded over the design threshold load and a critical electrical lineup fails, the resulting load transferring to the remaining available critical electrical lineups will exceed the rating of the critical electrical lineups and will lead to over-current protection devices tripping open due to the overload condition. Therefore, it is vital to the reliability of the data center to make sure that all critical electrical lineups remain below the design thresholds described above.

3.2.4.2 *Utility-to-Generator Transfer Control Components and Logic*

In a switchboard located next to the Generator Alternator, there will be a Load Disconnect Breaker that is normally closed while the generator is both in and out of operation. From that load disconnect, power will be brought into the data center facility terminating on a dedicated Main Generator Input Breaker on the lineup Main Switchboard.

This Generator Main Breaker will be electrically interlocked with an adjacent Utility Transformer Main Breaker to allow only one of the breakers to close at any time. Upon the loss of utility power, the digital transfer controller will send a start signal to the generator, followed by the Utility Breaker opening, followed by a confirmation that the generator has started leading to the Generator Main Breaker being closed. All transfers to/from generator will be open transition.

When the Generator Main Breaker is closed, the power created from the individual generator will then be transmitted to the IT equipment via a 2-MW or 2,000 kilowatts (kW) UPS system and to mechanical equipment designed to cool the IT equipment load served by the UPS. This load will be the same load that the dedicated Utility Transformer was supplying power to prior to the utility interruption. Power from this individual generator cannot be transferred to any other load or system, or anywhere outside the facility.

The UPS system includes back-up batteries sized for a minimum of five minutes of battery back-up time at the battery's end of life. During the time between a transfer between utility and generator power, the UPS system continues to support the IT equipment load without interruption. During a utility-to-generator transfer, the duration of the power outage between the sources will typically be around 15 seconds since it will take approximately ten seconds to get the generator started and up to voltage and frequency. During a generator-to-utility transfer, the duration of the power outage between the sources will typically be less than five seconds (during this period the IT loads will be supplied by the UPS).

3.2.4.3 *Uninterruptible Power Supply (UPS) System Description*

The UPS System and Batteries will be part of the NTDC and will not be part of the NTBGF. However, the following description is provided to describe how the UPS system will operate. The UPS will protect the load against power quality issues. The UPS will have built-in protection against permanent damage to itself and the connected load for all predictable types of malfunctions. The load will be automatically transferred to the bypass line in an open transition manner but without interruption in the event of an internal UPS malfunction or overload condition. The status of the UPS system will be indicated on an LCD graphic display screen on the front of the UPS. The UPS will operate in the following modes:

- Normal – Insulated Gate Bipolar Transistor (IGBT) Rectifier converts alternating current (AC) input power to direct current (DC) power for the inverter and for charging the batteries. The IGBT inverter supplies clean and stable AC power continuously to the critical load while regulating power factor and minimizing total harmonic distortion. The UPS Inverter output will be synchronized to the bypass AC source when the bypass source is within the AC input voltage and frequency specifications.
- Loss of Main Power - When Main Power is lost, the battery system will automatically feed the inverter so there is no interruption of AC power to the critical load.
- Return of Main Power or Generator Power - The system shall recover to the Normal Operating Mode and shall cause no disturbance to the critical load while simultaneously recharging the backup battery.
- Transfer to Bypass AC source - If the UPS becomes overloaded, or an internal fault is detected, the UPS controls shall automatically transfer the critical load from the inverter output to the bypass AC source without interruption. When the overload or internal warning condition is removed, after a preset "hold" period the UPS will automatically re-transfer the critical load from the bypass to the inverter output without interruption of power to the critical load.
- Maintenance Bypass - A manual make-before-break maintenance bypass panel will be provided to electrically isolate the UPS for repair, maintenance or test without affecting the operation of critical load.

The UPS system batteries will be lithium and will have tab washers mounted on front terminal posts capable of accepting the wiring components of a battery monitoring system. Batteries will have an expected life of ten years. Each battery bank will provide a minimum of five minutes of backup at 100 percent rated inverter load of 2,000 kW, @ 77°F (25°C), 1.67 end volts per cell.

3.2.5 Generator System Description

Each of the 40 3-MW generators will be Caterpillar Model C175-16 diesel-fired generators. Each of the two 1.75-MW generators will be Caterpillar Model 3512C diesel-fired generators. All generators will be equipped with Selective Catalytic Reduction (SCR) equipment, diesel exhaust fuel, and diesel particulate filters (DPF) to comply with Tier 4 emissions standards. The maximum peak generating capacity of each generator will be 3-MW for standby applications (short-duration operation). Under typical backup operation, when all generators are active, the maximum load on each generator will be designed to be 80 percent of the peak capacity. Manufacturer specification sheets and performance data for the proposed generators are provided in Appendix C.

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

The generator package will integrate an SCR and Diesel Exhaust Fluid (DEF) tank. The generators will be constructed in a generator yard immediately adjacent to the building it serves as shown in Sheet Index A 1.0 in Appendix A for DC North and Sheet Index A 1.0 in Appendix B for DC West. The generators will be housed in an enclosure placed on a concrete slab. The enclosures for each individual 3-MW generator will be approximately 13 feet wide, 48 feet long and 20 feet high. Generators will have stack heights approximately 25 feet above ground level. The enclosure for each 1.75-MW generator will be approximately 10 feet wide, 37 feet long, and 16 feet high. The generators will have stack heights approximately 25 feet above the ground level. Each generator will be spaced approximately 12 feet apart horizontally. Each generator yard will be enclosed with a 17 foot high metal screen to obscure views of the generators.

3.2.6 Fuel System

The backup generators will use renewable diesel as its primary fuel when feasible and ultra-low sulfur diesel as fuel (<15 parts per million sulfur by weight) when renewable diesel is not readily available.⁷ Each generator will have a dedicated up to 6,500 gallon tank integrated into its enclosure. Tanks will be double walled with leak detection.

⁷ See PDM GHG-1.

Each of the smaller house generators will have an integrated diesel fuel tank in its enclosure with a maximum capacity of approximately 3,000 gallons.

The generators will have a combined diesel fuel storage capacity of approximately up to 234,000 gallons, which is sufficient to provide more than 24 hours of emergency generation at full electrical worst-case demand of the NTDC.

3.2.7 Cooling System

Each generator will be air cooled independently as part of its integrated package and therefore there is no common cooling system for the NTBGF.

3.2.8 Water Supply and Use

The NTBGF will not require any consumption of water.

3.2.9 Waste Management

The NTBGF will not create any waste materials other than minor amounts of solid waste created during construction and maintenance activities.

3.2.10 Hazardous Materials Management

The NTBGF will prepare a Spill Prevention, Control, and Countermeasure Plan (SPCC) to address the storage, use and delivery of diesel fuel for the generators.

Each generator unit and its integrated fuel tanks have been designed with double walls. The interstitial space between the walls of each tank is continuously monitored electronically for the existence of liquids. Additionally, the standby generator units will be housed within a self-sheltering enclosure that prevents the intrusion of storm water.

Diesel fuel will be delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of approximately 17,500 gallons. To refuel the DC West generators, the tanker truck parks on the access road to the east of the DC West generator yard and extends the fuel fill hose through one of multiple hinged openings in the screen wall surrounding the generator equipment yard or via a centralized fueling station located on the exterior of the precast screen wall. To refuel the DC North generators, the tanker truck parks on the access road to the South of the DC North generator yard and follows the same process of extending the fuel fill hose through one of multiple hinged openings.

There will be no loading/unloading racks or containment for re-fueling events; however, a spill catch sump is located at the low spots within each fill port for the fuel tank. To prevent a release from entering the storm drain system, storm drains will be temporarily blocked off by the truck

driver and/or facility staff during fueling events. Rubber pads or similar devices will be kept in the generation yard to allow quick blockage of the storm sewer drains during fueling events.

To further minimize the potential for diesel fuel to come into contact with stormwater, to the extent feasible, fueling operations will be scheduled at times when storm events are improbable. Furthermore, the pads where site equipment would be situated, such as the emergency generators, would be elevated to 29 feet to adhere to flood conveyance restrictions set by the North San José Floodplain Management Policy (NSJFMP). Refer to Section 3.3.9.5 Floodplains for more details.

Warning signs and/or wheel chocks will 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 will be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures will be posted at the loading and unloading areas. DEF is used as part of the diesel engine combustion process to treat the exhaust gas and meet the emissions requirements. Each enclosure will have an approximately 100-gallon DEF tank. The tank can be filled in place from drums, totes or bulk tanker truck similar to the process identified for the diesel refuel process.

3.2.11 NTBGF Project Construction

Construction activities for the NTDC are expected to begin in the first quarter of 2026 and are discussed in more detail in Section 3.3.9.3 Site Grading, Demolition, Excavation, and Construction. Since the site preparation activities for the NTDC will include the ground preparation and grading of the entire NTDC site, the only construction activities for the NTBGF will involve construction of the generation yards for each data center building. This will include construction of concrete slabs, fencing, installation of underground and above ground conduit and electrical cabling to interconnect to the NTDC switchgear, as well as placement and securing of the generators. Prior to construction of the NTBGF, new site circulation roadways, fire lanes, utility tie-ins, and parking facilities serving the existing industrial buildings will have been established. Consequently, construction of the NTBGF will not materially impact the operational capacity of the existing industrial facilities located directly adjacent to the Project Site.

The generators themselves will be assembled off-site and delivered to site by truck. Each generator will be placed within the generation yards by a crane.

Construction of the generation yards and placement of the generators is expected to take six months and is included in the overall construction schedule for the NTDC described in Section 3.3.9.3 Site Grading, Demolition, Excavation, and Construction. Construction personnel for the NTBGF are estimated to range from 10 to 15 workers including one crane operator.

3.2.12 NTBGF Facility Operation

The backup generators will be run for short periods for testing and maintenance purposes and otherwise will not operate unless there is a disturbance or interruption of the utility supply. The Bay Area Air District's (Air District) Authority to Construct and the California Air Resources Board's (CARB) Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). Each generator will be tested individually during monthly and annual testing. Generators will only be run simultaneously during an emergency utility outage.

3.3 NTDC Facilities Description

3.3.1 Overview

As described in Section 1.3 Commission SPPE Jurisdiction, the Commission SPPE's determination is limited solely to the NTBGF. However, in order for the Commission to inform the decision-makers of the potential environmental effects of the NTBGF, in combination with the NTDC, LBA RVI-Company I, LP has included a complete description of the NTDC. The components of the NTDC will include:

- Two approximately 207,000 square-foot two-story data center buildings designated as DC North and DC West;
- Ancillary water pump houses and storage water tanks serving DC North and DC West;
- A Project Substation;
- Expansion of an existing permitted PG&E Switching Station;
- The NTBGF;
- Site access and surface parking;
- Landscaping;
- Stormwater controls and features; and
- Domestic Water, recycled water, and sewer pipeline interconnections.
- Improvements to the Right-of-Way at the Project frontage including curb, gutter, and sidewalk replacement, reconstruction or relocation of driveway cuts, and addition of storm, sewer, and water utility laterals to the Project Site.
- Intersection improvements at the southwest and southeast corners of the Trimble Road and Orchard Parkway intersection;

3.3.2 Data Center Buildings

The NTDC main component will consist of two approximately 207,000 square foot data center buildings (designated DC North and DC West). Each building will be two-stories and will house

computer servers for private clients in a secure and environmentally controlled structure designed to provide 36 MW of power to Critical IT equipment.

The data center buildings will consist of two main components: (1) the data center suites that will house client servers and (2) the administrative facilities including support facilities (such as the building lobby, restrooms, conference rooms, landlord office space, customer office space, loading dock and storage).

The data center suite component within each data center building will consist of two levels of data center space with each level containing four data center suites and corresponding electrical/UPS rooms. The data center will be being designed with an average rack power rating of 5 to 7 kW.

Each data center building is expected to have between 20 employees and 30 visitors (including deliveries) visit the site per day.

3.3.2.1 *Massing, Heights and Setbacks*

Each two-story data center building will be composed of a data hall and administrative space with integrated loading dock masses. The administrative space, located on the northeast side of DC North and the west side of DC West, will be clad with curtain wall and exterior insulated finishing systems. The data hall portion will be clad in exterior insulated finishing system panels. The top of the parapet at the administrative space and data hall will be 55.5 feet above grade. Two stairs located on the end corners of each building's data hall portion will be fully enclosed within the building footprint. Each building will also include stairs in the administrative space. A rooftop mechanical penthouse will be provided for mechanical equipment. A sound attenuating screen topping off at 72 feet above the first-floor level fully encloses the penthouse. Access to the rooftop will be provided by the admin staircase mentioned above, with the top of the structure being approximately 59 feet above grade. The maximum height to the top of the rooftop mechanical equipment would be 81.4 feet.

DC North will be located on the northeast portion of the Project Site with its long axis oriented generally in an east-west configuration. The DC North building will conform to the zoning minimum building setback standards of 10 feet from West Trimble Road and Orchard Parkway and 15 feet from all other interior property lines. The DC North building will be designed to be set back approximately 20 feet from West Trimble Road, approximately 200 feet from Orchard Parkway, and approximately 35 feet from the property line at the center of the private access road to the south.

The first floor, second floor, and roof plan for DC North are shown in Sheet Index A 1.0, A 1.1, and A 1.2, respectively, in Appendix A. The overall exterior elevation of DC North is shown in Sheet Index A 2.0 in Appendix A.

DC West will be located on the west end of the Project Site with its long axis oriented generally in a north-south configuration. The DC West building will conform to the zoning minimum building

setback standards of 15 feet front and zero feet all other property lines. The DC West building will be designed to have an approximately 65 feet front setback from West Trimble Road, approximately 200 feet setback from the western property line adjacent to Guadalupe River, approximately 260 feet setback from the southern property line with the adjacent future data center facility, and approximately 20 feet setback from the property line at the center of the access road.

The first floor, second floor, and roof plan for DC North are shown in Sheet Index A 1.0, A 1.1, and A 1.2, respectively, in Appendix B. The overall exterior elevation of DC North is shown in Sheet Index A 2.0 in Appendix B.

3.3.2.2 *Cooling Technology*

Hybrid cooling towers and water-cooled chillers will be used to remove heat generated in the data center. They will be sized to be able to carry the full heat load with reduced water usage when compared to traditional open cooling towers. The units will also have an optional free-cooling coil that allows for further reduced and possibly even eliminated water usage, given agreeable ambient conditions. For this operation, recycled water will be utilized. However, due to water quality required by the manufacturer, a localized water treatment (as part of the building operations) will be required to ensure water quality is maintained at the cooling towers.

Both the data halls and office areas will also require minimal humidification. Although less than the cooling towers noted above, these systems will also use some water and will be connected to the same water treatment systems.

There will be some discharge from the cooling towers and a negligible amount from the humidification system. The discharge from the cooling towers utilizing reclaimed water, a corresponding bespoke water treatment approach from Nalco (a water management solutions company), and an assumed range of 4-6 Cycles of Concentration for the cooling tower water.

The chiller plant will include both high-temperature and low-temperature water-cooled chillers that will be supported by the hybrid cooling towers. The cooling towers and high-temperature water-cooled chillers will work together to provide cooling water for both direct liquid cooling in the IT racks and air cooling of the data halls. The cooling water will be provided to coolant distribution units, which will heat exchange with technical water (anticipated to be a 25 percent glycol/water mixture) that will in turn be pumped to the IT racks for direct liquid cooling. The direct liquid cooling will be capable of removing approximately 80 percent of the IT heat load produced by the IT racks. The data hall air cooling will be capable of removing the remaining approximately 20 percent of the IT heat load. This air cooling could also handle up to 25 to 30 percent of the IT heat load to allow for underperforming direct liquid cooling. The air cooling for the data halls will be in the form of either perimeter cooling equipment (e.g., computer room air handler, fan coil walls, etc.) or rear door heat exchangers. Perimeter cooling will require Hot Aisle Containment to direct the hot air rejected out

the back of the IT racks, up into a return plenum ceiling and back to the perimeter cooling units, before being distributed back to the data hall.

The cooling towers and low-temperature water-cooled chiller will work together to provide chilled water for air cooling of both the critical electrical rooms and various technology spaces (e.g., minimum point of entry, meet-me room, main distribution frame, and intermediate distribution frames, etc.).

The non-critical spaces (admin, office, loading, storage and corridor areas) will be conditioned via a network of variable refrigerant flow (VRF) split system air conditioning systems with condensing units on the roof and fan coil units distributed through the spaces.

3.3.3 Project Substation

The Project will construct a new 115-34.5 kilovolt (kV), 110 mega volt-ampere (MVA) electrical substation (Project Substation) adjacent to the proposed expansion of the recently permitted PG&E utility switchyard (see Section 3.3.4 PG&E Switching Station Expansion below). The two-bay Project Substation (two 105 MVA 115kV - 34.5 kV step-down transformers and primary distribution switchgear) will be designed to allow one of the two transformers to be taken out of service, effectively providing 105 MVA of total power (a 2-to-make-1 design). Refer to Sheet Index P 5.1 in Appendix B for the substation layout.

The Project Substation will have a gravel surface matching the adjacent PG&E Switching Station. A seven-foot high panel fence or screen wall will surround all sides of the substation. An oil containment pit surrounding each transformer will capture unintended oil leaks. Firewall protection will be included between the two transformers to meet fire and safety requirements. Access to the substation will be from a private road serving the data center buildings.

The Project Substation will be capable of delivering electricity to the facilities from the new 115kV switchyard recently permitted by PG&E. The utility will not allow any electricity generated from the data center to be delivered to the transmission grid. Availability of Project Substation control systems will be ensured through a redundant DC battery backup system. A one-line diagram of the Project Substation is included in Appendix D.

3.3.4 PG&E Switching Station Expansion

To serve the NTDC, PG&E will be expanding its soon to be permitted Component Switching Station located on a separate parcel immediately adjacent to the southern boundary of the Project Site. This PG&E Switching Station will be permitted and constructed to provide the utility owned

infrastructure to serve the adjacent Microsoft SJ04 Data Center Project.⁸ For the NTDC, PG&E will be expanding the PG&E Switching Station onto the Project Site property. To accommodate the land necessary for expansion of the PG&E Switching Station, LBA RVI-Company I, LP will request a lot-line adjustment to allow the finished expanded PG&E Switching Station to be owned and operated by PG&E. The portion of the site accommodating the PG&E Switching Station expansion will be deeded to PG&E.

The PG&E Switching Station will have crushed rock surface with an aggregate base. A 10 foot high panel fence or screen wall will surround all four sides of the switchyard. Access to the PG&E Switching Station will be from a dedicated entrance gate not accessible to the public. The PG&E Switching Station will use 115-kV circuit breakers with a 3,000 Amp and 63 kiloAmp fault duty rating using SF₆. A preliminary one-line diagram for the expanded PG&E Switching Station will be provided to the Commission under a separate cover.

3.3.5 Site Access and Parking

The site will have four access points from the bordering public streets of West Trimble Road and Orchard Parkway. As the Project is a redevelopment of an existing site, portions of the existing access and circulation system will remain. Primary access to common site-wide circulation exists via a right-in and right-out access point on West Trimble Road and a signalized full-movement intersection on Orchard Parkway. A secondary right-in, right-out access point will be created approximately 300 feet south of the existing signalized intersection on Orchard Parkway. These three access points will be connected to a private common circulation access loop serving the existing facility to remain, DC North and DC West. A fourth access point will also be created approximately 220 feet north of the existing signalized intersection on Orchard Parkway. This access point is dedicated to vehicular access to DC North employee/visitor parking and is right-in and right-out only.

The main entrance to DC North will be in the northeast corner of the site accessed through the dedicated driveway on Orchard Parkway and pedestrian linkage at West Trimble Road. Service, loading and fire access to DC North will be taken from the common private access road on the southern property line.

The main entrance to DC West will be located in the northwest corner of the site accessed via common private access roads as DC West does not have a direct access point on a public street. Service, loading and fire access to DC West will be taken from the common private access roads on the north and east sides of the building.

⁸ The PG&E Switching Station Expansion is an independent project being undertaken under a separate environmental review and is not part of this SPPE Application. The PG&E Switching Station is analyzed as part of the San José Data Center 04 SPPE Application, which is under with the Commission under TN #245946. The public docket for the San José Data Center 04 project is available here: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-SPPE-02>.

The Project will provide a total of 133 parking spaces on site dedicated specifically to DC North and DC West. Of the aggregate total, 123 parking spaces will be standard spaces, 6 parking spaces will be ADA standard spaces, 2 parking spaces will be ADA Van Accessible spaces and 2 parking spaces will be EV Supply Equipment accessible spaces. Of the 123 standard parking spaces, 12 parking spaces will be Electric Vehicle (EV) Supply Equipment spaces and 56 parking spaces will be EV capable spaces. The proposed parking plan conforms to City of San José Municipal Code and California Green Building Standards (CALGreen).

The entrances, exits, and parking lots for DC North and DC West are shown in Sheet Index P 8.0 in Appendix A and Sheet Index P 7.0 in Appendix B, respectively.

3.3.6 Landscaping

The current condition of the site is a varied mix of existing buildings, parking areas, landscaped areas and either undeveloped or previously demolished areas. Development of the Project Site will entail removal and replacement of landscaping throughout.

New landscaping for the NTDC will consist of trees, large and medium shrubs, and groundcovers installed along the property boundaries, building perimeters, and landscape areas distributed throughout parking facilities and pedestrian areas. Trees will be planted to maintain appropriate setbacks from new and existing water mains or utility lines.

The new landscaping will include a mixture of native and climate adapted non-native trees, shrubs, and groundcovers. New planting will be tolerant of recycled water and will meet the State and City water efficient landscaping ordinance (WELO) requirements for water use through use of water-wise plant material. Based on Project calculations, the new planting will be a minimum of 20 percent under the landscape maximum water use for the site. The landscaping plan is provided in Sheet Index L 2.0 in Appendix A for DC North and Sheet Index L 2.0 and L 2.1 in Appendix B for DC West and the Project substation.

3.3.7 Stormwater Controls and Features

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit 3.0 (MRP) to regulate stormwater discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 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). Examples of C.3 LID measures include bioretention areas, flow-through planters, and subsurface infiltration systems.

The NTDC Project proposes to construct stormwater treatment areas consisting of LID bioretention areas and at-grade flow-through planter boxes totaling approximately 36,000 square feet, based on preliminary impervious calculations, sized according to the requirements of the MRP. The stormwater treatment areas will be located around the perimeter of proposed buildings and adjacent to parking lots, access roads, and equipment yards.

In the existing condition, stormwater from the NTDC site discharges to City of San José public Storm Drain mains located in Orchard Parkway and Trimble Road. There are four existing storm drain laterals connecting the Project Site to the mains - two on Trimble Road and two on Orchard Parkway. In the event that the storm drain laterals are clogged or rainfall exceeds the lateral capacity, overland flows will occur and will release at the lowest point of the site, which is in the vicinity of the Trimble Road and Orchard Parkway intersection.

The proposed NTDC site will attempt to utilize the existing storm drain laterals to the greatest extent feasible, but will propose at least one additional storm drain lateral connection to ensure proper capacity is met. The existing overland release point for the site will be maintained.

Proposed impervious surfaces (building roof, parking, roads, equipment yards, etc.) will drain into bioretention areas or flow through planters. Flow-through planters and bioretention areas will include perforated underdrains and overflow structures that connect to the on-site storm drains systems, which will discharge the treated water to the public storm mains. Refer to Sheet Plan C 3.0 in Appendix A for the Project Site stormwater control plan

3.3.8 Trimble Road and Orchard Parkway Intersection Improvement

In preliminary discussions with staff from the Development Services Division of the City of San José Public Works Department, staff anticipates that the City will seek to impose a Condition of Approval as part of the Project's Conditional Use Permit and Planned Development Permit requiring the Project to improve both the southwest and southeast corners of the Trimble Road and Orchard Parkway intersection. Given the foregoing, the Project has incorporated this improvement as part of the Project.⁹

The improvement to the intersection corners will consist of removal of the existing pedestrian refuge (pork-chop) islands at the southwest and southeast corners. Removal of these islands will require a modification of the existing traffic signal to relocate the existing poles from the pedestrian refuge islands.

⁹ It is important to note the City is also including this same Condition of Approval on the Site Development Permit (file CP23-008) associated with the property directly south of the Project Site, which is associated with the SJ04 Project currently under review at the CEC (22-SPPE-02). The City has stated that construction of these intersection improvements will be the responsibility of whichever project's building permit is approved first, subject to a pro rata fair share apportionment of costs. Therefore, for purposes of a conservative analysis, the Project's CEQA document will incorporate these improvements as a PDM.

It is important to recognize these improvements will not be required as a mitigation pursuant to CEQA to offset design elements of the Project. Rather, the City often conditions development projects outside of the CEQA process to make improvements to the City street network to provide what the City views as operational improvements to vehicular and pedestrian safety in the area of a project.

3.3.9 Utility Interconnections

As part of the construction of the new buildings, domestic water, fire water, sanitary sewer, and fiber connections will be made. The utility plan for DC North is shown in Sheet Index C 2.0 in Appendix A and in Sheet Index C 2.0 and C 2.01 in Appendix B for DC West.

3.3.9.1 *Domestic Water Infrastructure*

The site is served by existing 12-inch water mains on West Trimble Road and Orchard Parkway. Laterals will provide water service for potable, irrigation, and fire water needs at the buildings.

3.3.9.2 *Sanitary Sewer Infrastructure*

Under existing conditions, the NTDC site is served by a sanitary sewer lateral connection to the existing 20-inch sanitary sewer main on Trimble Road. The proposed NTDC site will attempt to re-use this lateral to the greatest extent possible, but may construct one or more additional sanitary sewer laterals. These proposed sewer laterals may connect to the 20-inch main on Trimble, or to the additional existing 48-inch main on Trimble Road or 15-inch main on Orchard Parkway. It is not anticipated that upgrades to the existing public mains will be required, or that there are any capacity issues with these mains.

3.3.9.3 *Recycled Water*

Recycled water for the Project would be used for landscaping and data center cooling purposes. There is currently no existing recycled water service to the Project Site. However, as part of a separate development project, a recycled water pipeline would be extended from an existing recycled water main at the intersection of Montague Expressway and Kruse Drive in San Jose to Orchard Parkway adjacent to the Project Site. The Project will connect to the new recycled water pipeline through an underground pipeline in Orchard Parkway.¹⁰

¹⁰ Similar to the PG&E Switching Station Expansion, the construction and operation of an extended recycled water line is an independent project being undertaken under a separate environmental review and is not part of this SPPE Application. The recycled water line is analyzed as part of the San José Data Center 04 SPPE Application, which is under review with the Commission under TN #245946. The public docket for the San José Data Center 04 project is available here: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-SPPE-02>.

3.3.9.4 *Site Grading, Demolition, Excavation, and Construction*

Site grading, excavation, and construction is anticipated to begin in January 2026 and run through December 2028. Construction will total approximately 36 months. The peak construction workforce will be approximately 600 workers per month with an average of approximately 300 workers per month.

The proposed grading will involve cut and fill throughout the NTDC limit of work. Cut and fill will generally be limited to approximately four feet, excluding excavations for utilities and deep foundation systems. The precise depth of excavation is not yet defined, but is presumed to extend to groundwater. Excess soils will be exported off-site to an appropriate location to be determined during the permitting and construction phases of the Project.

3.3.9.5 *Floodplains*

NTDC is located in Zone X (area outside the 500 year floodplain) and Zone AH (Special Flood Hazard Area) with base flood elevation of 27 feet. These designations are per the flood insurance rate map, Federal Emergency Management Agency's (FEMA) panel No. 06085C0068J dated February 19, 2014.

The NTDC site also falls within the North San Jose Floodplain Management Policy (NSJFMP) study area, where the City of San José has conducted its own flood study independent of the FEMA flood maps. The NSJFMP indicates that shallow surface flood conveyance could reach an elevation of approximately 28 feet in the vicinity of the two proposed data center buildings. Therefore, the grading design of these structures will be to elevate the finish floor elevation to at least 29 feet, providing one foot of freeboard above the flood elevation. Since this elevation is higher than the floodplain elevation given by FEMA, NSJFMP will govern the grading design of the site. The Flood Analysis is shown in Sheet Index C 4.0 in Appendix A.

The NSJFMP also stipulates that the proposed site grading must not completely obstruct the passage of shallow surface flood water through the site. To comply with this requirement, a portion of the site along the Orchard Parkway side will maintain the existing elevations. Equipment within this area (including the PG&E switching station and NTDC substation) will have pads elevated above the flood elevation. A detailed discussion of the Project's compliance with the NSJFMP is included in Section 4.10 Hydrology and Water Quality.

3.3.10 *Site Water Supply and Use*

3.3.10.1 *Construction*

Grading and construction of the NTDC including the NTBGF is estimated to utilize approximately 1.75 acre-feet of water over the 36-month construction period.

3.3.10.2 NTDC Operation

As described above in Section 3.3.2.2 Cooling Technology, the NTDC uses hybrid closed-circuit cooling towers and water-cooled chillers for cooling needs of the data center. Table 3.3-1, Table 3.3-2, and Table 3.3-3 present the potable water, reclaimed water, and sewer demand for the site, respectively.

Table 3.3-1: Proposed Potable Water Demand

Land Use	Average Daily Demand (gallons per day)	Average Yearly Demand (gallons per year)	Average Yearly Demand (acre-feet per year)
FTE Indoor Demand	500 – DC North	182,500 – DC North	0.56 - DC North
	500 – DC West	182,500 – DC West	0.56 - DC West
Landscaping	545 – DC North	199,125 – DC North	0.61 – DC North
	545 – DC West	199,125 – DC West	0.61 – DC West
Total Demand	1,045 – DC North	381,625 – DC North	1.17 - DC North
	1,045 – DC West	381,625 – DC West	1.17 - DC West

Table 3.3-2: Proposed Reclaim Water Demand

Land Use	Average Daily Demand (gallons per day)	Average Yearly Demand (gallons per year)	Average Yearly Demand (acre-feet per year)
Data Center Critical Cooling	437,760 – DC North	159,782,400 – DC North	490 - DC North
	437,760 – DC West	159,782,400 – DC West	490 - DC West
Total Demand	437,760 – DC North	159,782,400 – DC North	490 - DC North
	437,760 – DC West	159,782,400 – DC West	490 - DC West

Table 3.3-3: Proposed Sewer Demand

Land Use	Average Daily Demand (gallons per day)	Average Yearly Demand (gallons per year)
Administrative HVAC	145 – DC North	52,925 – DC North
	145 – DC West	52,925 – DC West
Data Center Critical Cooling	108,777 – DC North	39,703,824 – DC North
	108,777 – DC West	39,703,824 – DC West
FTE Indoor Demand	500 – DC North	182,500 – DC North
	500 – DC West	182,500 – DC West
Total Demand	109,422 – DC North	39,939,030 – DC North
	109,422 – DC West	39,939,030 – DC West

3.4 Project Design Measures

The following Project Design Measures (PDM) are proposed by LBA RVI-Company I, LP and are incorporated into the design of the Project. They are outlined here to ensure that Commission's Staff assessment of the potential impacts of the NTBGF and NTDC is completed with these measures in place. These PDMs are also repeated in each environmental technical section where applicable and in many cases are identical to the Mitigation Measures adopted by Staff and approved by the Commission in recent SPPE proceedings.

Air Quality

PDM AIR-1: Fugitive Dust Best Management Practices. To incorporate the Bay Area Air District (Air District) recommendations for Best Management Practices (BMPs) to control fugitive dust, the Project Owner shall implement a construction emissions control plan that has been reviewed and approved by the Director of Planning, Building, and Code Enforcement or the Director's designee prior to the issuance of any grading or building permits, whichever occurs earliest. The Project Owner shall implement the following measures during construction:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 5 mph.
- All new roadways, driveways, and sidewalks shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.

- Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points.
- Properly tune and maintain all construction equipment in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Post a publicly visible sign with the telephone number and name of the person to contact regarding dust complaints and the Air District telephone number. The contact person shall implement corrective measures, as needed, within 48 hours, and the Air District shall be informed of any legitimate complaints received to verify compliance with applicable regulations.

Biological Resources

PDM BIO-1.1: Nesting Season Avoidance. To the extent feasible, commencement of construction activities should be scheduled to avoid the nesting season (September 1 through January 31, inclusive). If construction activities are scheduled to commence outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in Santa Clara County extends from February 1 through August 31, inclusive.

PDM BIO-1.2: Preconstruction Survey. If it is not possible to schedule commencement of construction activities and/or tree removal between September 1 and January 31, preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities or initiation of tree removal and pruning. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and up 300 feet from the impact areas for nests.

PDM BIO-1.3: **Buffer zones.** During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and up 300 feet from the impact areas for nests. If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, the ornithologist shall establish a species-specific work exclusion zone around each nest that shall be followed by the contractor. If an active nest is found within a distance that could result in disturbance, the ornithologist shall establish a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other bird species) to prevent nest disturbance.

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

PDM BIO-1.4: **Buffer Monitoring.** The project buffer shall be monitored on a frequency determined by the project ornithologist to verify compliance. After nesting is complete and all young have fledged, as determined by the ornithologist, the buffer would no longer be required, and tree removal may occur. If an active bird nest is discovered during demolition or construction, then a buffer zone shall be established under the guidelines specified above.

PDM BIO-1.5: **Reporting.** A report detailing the survey findings and any required buffer zones shall be submitted to the Director of Planning, Building, and Code Enforcement or the Director's designee for review and approval prior to tree removal and the issuance of a grading or demolition permit. The report shall contain maps showing the location of all nests, species nesting, status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and the buffer size around each nest (including reasoning behind any alterations to the initial buffer size). The report shall be provided within 10 days of completing a preconstruction nest survey.

PDM BIO-1.6: **Worker Environmental Awareness Program.** A qualified biologist shall be retained by the project owner/developer to conduct a Worker Environmental Awareness Program (WEAP) training focused on nesting bird protection for all construction personnel prior to the commencement of any ground disturbing activities during the nesting season. The training shall include a description of nesting bird species that may be encountered, regulatory protections under the

Migratory Bird Treaty Act and California Fish and Game Code and other state and federal laws protecting birds, survey and buffer requirements during the nesting season, and proper protocols for reporting and avoiding impacts to active nests.

PDM BIO-2: Pay Habitat Plan Burrowing Owl Fees for Impacts on Occupied Nesting Habitat.

Prior to the issuance of any demolition, grading, or tree removal permit (whichever occurs first), the Project shall pay the Habitat Plan burrowing owl fees for the portion of California annual grassland that is permanently lost and located within 0.5 mile of a burrow that has been used for nesting within the three years prior to the start of construction, as mapped in the Habitat Agency's burrowing owl fee zone or based on the results of the project's pre-activity surveys and other surveys regularly performed in the area.

PDM BIO-3: Bird Collision. Due to the potential for bird collisions with the DC North and DC West buildings, the project shall implement the following bird-safe building design considerations for these facades:

- Reduce the extent of glass on building facades, to the extent feasible (as determined in consultation with the City and consistent with any City building design standards and California Building Code requirements).
- Reduce or eliminate the visibility of plants behind glass.
- All glazing used on the building facades shall have a reflectivity index of no more than 20 percent. Any bird-safe glazing shall have a reflectivity index of no more than 15 percent.
- No more than 10 percent of the surface area of the combined façades for each building shall have untreated glazing between the ground and 60 feet above ground. Bird-safe glazing treatments may include fritting, netting, permanent stencils, frosted glass, exterior screens, physical grids placed on the exterior of glazing or ultraviolet patterns visible to birds. Bird-safe treatments shall have the following specifications, to ensure they are sufficiently effective:
 - Vertical elements of the window patterns shall be at least 0.25 inch wide at a maximum spacing of 4 inches or have horizontal elements at least 0.125 inch wide at a maximum spacing of 2 inches.

OR

- o Bird-safe glazing shall have a Threat Factor¹¹ less than or equal to 30.
- Avoid free-standing clear glass walls, skywalks, transparent building corners, glass enclosures (e.g., greenhouses) on rooftops, and free-standing clear glass railings where feasible. If any such features are included in the project design, all glazing used in any such features shall be 100 percent treated as specified above. These features shall be treated to a height of 60 feet above grade. Features located more than 60 feet above grade are not required to be treated. For transparent glass corners, the required treatment area extends horizontally from a building corner as far the corner as it is possible to see through the corner to the other side of the building.
- Landscaping, including planted vegetation and water features, shall be designed to minimize the potential for collisions adjacent to glazed building facades. For example, vegetation providing particularly valuable resources to birds (such as fruits) shall be planted away from glass facades, and vegetation in general shall be planted in such a way that it is not clearly reflected in windows. Water features shall be located away from building exteriors to reduce the attraction of birds toward glazed facades.

Due to the potential for night lighting to disorient birds, the project shall implement the following bird-safe design considerations for all new interior and exterior lighting on the project site:

- Minimize exterior lighting to the extent feasible, except as needed for safety/security. All exterior lights shall be shielded and directed toward facilities on the project site to ensure that light is not directed upward or outward toward the Guadalupe River.
- Occupancy sensors or other switch control devices shall be installed on interior lights, with the exception of emergency lights or lights needed for safety/security purposes. If occupancy sensors are not active, these lights shall be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.
- To the extent consistent with the normal and expected operations of commercial uses under the project, take appropriate measures to

¹¹ A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at <https://abcbirds.org/glass-collisions/products-database/>.

avoid use of unnecessary lighting at night. Such measures may include the installation of motion-sensor lighting, automatic light shut-off mechanisms, downward-facing exterior light fixtures, the use of Dark-Sky-approved lighting¹², and others.

Site plans demonstrating incorporation of the above measures shall be reviewed and approved for effectiveness by a qualified ornithologist. The site plans approved by the qualified ornithologist shall be submitted to the Director of Planning, Building and Code Enforcement or the Director’s designee for approval prior to the issuance of any planning permit.

PDM BIO-4: **Santa Clara Valley Habitat Plan Nitrogen Deposition Fee.** Prior to the issuance of any demolition, grading, or tree removal permit (whichever occurs first), the Project shall pay Santa Clara Valley Habitat Plan nitrogen deposition fees. The Project Applicant shall submit the Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of Planning, Building & Code Enforcement or the Director's designee for approval and payment of the nitrogen deposition fees prior to the issuance of a grading permit.

PDM BIO-5: **Tree Removal Permit.** Prior to any tree removal, a tree removal permit shall be obtained from the City of San José. The removed trees would be replaced according to tree replacement ratios required by the City as outlined in Table 4.4-1.

Table 4.4-1 Tree Replacement Ratios				
Circumference of Tree to be Removed	Replacement Ratio - Native	Replacement Ratio – Non-Native	Replacement Ratio - Orchard	Minimum Size of Each Replacement Tree**
38 inches or more	5:1*	4:1	3:1	15-gallon
19 up to 38 inches	3:1	2:1	none	15-gallon
Less than 19 inches	1:1	1:1	none	15-gallon

¹² Exterior lighting fixtures that meet the International Dark-Sky Association’s standards for artificial lighting minimize glare while reducing light trespass and skyglow, and are required to be fully shielded and minimize the amount of blue light in the nighttime environment (International Dark-Sky Association 2025).

*x:x = tree replacement to tree loss ratio

Note: Trees greater than or equal to 38-inch circumference measured at 54 inches above natural grade shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees. For Multi-Family residential, Commercial and Industrial properties, a permit is required for removal of trees of any size.

A 38-inch tree equals 12.1 inches in diameter.

** A 24-inch box replacement tree = two 15-gallon replacement trees

Single Family and Two-dwelling properties may replace trees at a ratio of 1:1.

- Prior to the issuance of building permit(s), the permittee shall pay Off-Site Tree Replacement Fee(s) to the City for off-site replacement trees in accordance with the City Council approved Fee Resolution in effect at the time of payment for any replacement trees that cannot be located on-site.
- If there is insufficient area on the Project Site to accommodate the required replacement trees, one or more of the following measures shall be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement or Director's designee. Changes to an approved landscape plan requires the issuance of a Permit Adjustment or Permit Amendment.
 - The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees to be planted on the Project Site.
 - Pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of building permit(s), in accordance with the City Council approved Fee Resolution in effect at the time of payment. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

Cultural Resources

PDM CUL-1.1: **Worker Environmental Awareness Program.** Prior to the commencement of construction, the Project Applicant shall secure the services of qualified archaeological and Native American monitors. These monitors shall prepare a workforce environmental awareness program (WEAP) to instruct construction workers of the obligation to protect and preserve valuable archaeological and Native American resources for review and approval by the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee. This programs hall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in

the project vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the specialists. The Project Applicant shall submit the qualifications of archaeological and Native American monitors, as well as an electronic copy of the WEAP to the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee.

PDM CUL-1.2: Construction Monitoring and Protection Measures. The Project Applicant shall secure the services of Native American and archaeological monitors to observe excavations of the native soils that underlie disturbed and fill dirt at the project site. The Native American monitor shall be selected based on the following:

- Traditional ties to the area being monitored.
- Knowledge of local Native American village sites.
- Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- Ability to travel to project sites within traditional tribal territory.
- Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5.
- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions.
- Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

The qualified archaeologist and Native American monitor shall have authority to halt construction activities temporarily in the immediate vicinity of an unanticipated find. If, for any reasons, the qualified archaeologist or qualified Native American monitor are not present but construction crews encounter a cultural resource, then all work shall stop temporarily within 100 feet of the find

until a qualified archaeologist in consultation with a qualified Native American monitor, have been contacted to determine the proper course of action. The City of San José's Director of Planning, Building and Code Enforcement or the Director's designee shall be notified of any finds during the grading or other construction activities.

PDM CUL-1.3: Undiscovered Archaeological Resources. If archaeological resources are encountered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee shall be notified, and a qualified archaeologist shall examine the find. The archaeological and Native American monitors shall evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it shall be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated in accordance with the recommendations of the archaeological and Native American monitors. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center prior to issuance of the certificate of occupancy.

The Project Applicant shall ensure that construction personnel do not collect or move any cultural material and shall ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.

PDM CUL-2: Stop Work for Human Remains. If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the

California Code of Regulations, Title 14. The archaeologist shall recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the City of San José Director of Planning, Building and Code Enforcement or the Director's designee, the Northwest Information Center, and the MLD.

Geology and Soils

PDM GEO-1: Geologic Hazard Best Management Practices. The Project shall incorporate and implement the following City of San José Standard Permit Conditions related to geological hazards during construction:

- To avoid or minimize potential damage from seismic shaking, the Project shall be constructed using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of an approved geotechnical investigation. The report shall be reviewed and approved by the City of San José Department of Public Works as part of the building permit review and issuance process. The buildings shall meet the requirements of applicable Building and Fire Codes as adopted or updated by the City. The Project shall be designed to withstand soil hazards identified on the site and the Project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the Building Code.
- All excavation and grading work shall be scheduled in dry weather months or, in the alternative, construction sites shall be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting when not in use.
- Ditches shall be installed to divert runoff around excavations and graded areas if necessary.
- The Project shall be constructed in accordance with the standard engineering practices in the California Building Code, as adopted by the City of San José. These standard practices would ensure that the future buildings on the Project Site are designed to properly account for soils-related hazards on the Project Site.

PDM GEO-2.1: Worker Environmental Awareness Program for Paleontological Resources.
Prior to the start of construction, the Project Applicant shall secure the services

of a qualified paleontologist specialist, as defined by the Society of Vertebrate Paleontology. The specialist shall prepare a Worker Environmental Awareness Program to instruct site workers of the obligation to protect and preserve valuable paleontological resources for review by the City's Planning Manager. This program shall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential paleontological resources encountered; and measures to notify their supervisor, the applicant, and the qualified paleontologist specialist.

Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers are halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.

PDM GEO-2.2: Stop Work for Paleontological Resources. If a fossil is encountered, the City shall be notified immediately and a qualified paleontologist shall be retained by the Project Applicant to examine the fossil, and if determined to be significant and avoidance is not feasible, Project construction shall be halted in the immediate area and the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. The excavation and salvage plan shall be provided to the City for approval prior to implementation. Construction work in the immediate area shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected shall be cleaned, repaired, sorted, and cataloged, along with copies of all pertinent field notes, photos, and maps.

Greenhouse Gas Emissions

PDM GHG-1: Carbon-Free Energy. The Project Owner shall participate in the SJCE at the TotalGreen level (i.e., 100% carbon-free electricity) for electricity accounts associated with the Project or participate in a clean energy program that accomplishes the same goals of 100 percent carbon-free electricity as the SJCE TotalGreen Level.

During operation, the Project Owner shall provide documentation to the Director or Director's designee with the City of San José Planning, Building and

Code Enforcement of initial enrollment and shall submit annual reports to the Director or Director's designee with the City of San José Department of Planning, Building and Code Enforcement documenting either continued participation in SJCE at the TotalGreen level or documentation that alternative measures continue to provide 100 percent carbon-free electricity, as verified by an independent third-party auditor specializing in greenhouse gas emissions.

PDM GHG-2: **Use of Renewable Fuel.** The Project Owner shall use renewable diesel fuel for the diesel-fired generators to the extent feasible. During an emergency where renewable diesel fuel supplies may be limited, the Project Owner shall document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project owner shall submit annual reports demonstrating the use of renewable resources for 100 percent of total energy use by the generators following project commencement.

Hazards and Hazardous Materials

PDM HAZ-1.1: Soil testing for arsenic, metals, and organochlorine pesticides shall be performed to determine if a Site Management Plan (SMP) shall be prepared. If soil testing identifies contaminants in areas of the Project Site to be disturbed that exceed both published naturally occurring background levels and applicable environmental screening levels (ESL) for the protection of future commercial/industrial workers published by the San Francisco Bay Regional Water Quality Control Board (RWQCB), the Project applicant shall be required to prepare and submit a SMP.

Components of the SMP (if required) shall include, but shall not be limited to:

- A detailed discussion of the site background;
- A description of either capping soils or removal and hauling soils off-site to a licensed non-hazardous or hazardous materials disposal site based on environmental testing of the soil.
- Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
- Development of cleanup levels as based on Section 4.25.2.3 of the RWQCB's The Water Quality Control Plan for the San Francisco Bay Basin (March 2023, Basin Plan);
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off- site waste disposal facility;
- Soil stockpiling protocols; and

- Protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities.

The SMP shall be submitted to the RWQCB, Santa Clara County Environmental Health Department, California Department of Toxic Substances Control, or equivalent regulatory agency for review and/or approval (if required). Copies of the approved SMP shall be provided to the Director of Planning, Building, and Code Enforcement or the Director's designee and the Environmental Compliance Officer in the City of San José Environmental Services Department prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest).

PDM HAZ-1.2: Prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest), 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 submitted to the Director of Planning, Building and Code Enforcement, or their designee, and the Environmental Compliance Officer in the City of San José Environmental Services Department 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
- Provisions for the onsite management and/or treatment of contaminated groundwater during extraction or dewatering activities; and
- A description of emergency procedures and identification of responsible personnel to contact in event of an emergency. Include

contact information for responsible personnel and other emergency contact numbers.

Copies of the approved HSPs shall be kept at the Project Site.

Hydrology and Water Quality

PDM HYD-1.1: Stormwater Best Management Practices. Consistent with applicable provisions of the General Plan, standard permit conditions that shall be implemented to prevent stormwater pollution and minimize potential sedimentation during construction include, but are not limited to, the following:

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities shall be suspended during periods of high winds and when other dust reducing measures are ineffective.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be covered and all trucks shall maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the Project Site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system shall be installed if requested by the City.
- The Project Applicant shall comply with the City of San José Grading Ordinance, including implementing erosion and dust control during site preparation and with the applicable City of San José Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.

PDM HYD-1.2: The discharge of any water from construction dewatering activities shall be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements or wastewater discharge permit conditions to the sanitary sewer. For short-term discharge (less than 1-year), a discharge permit shall be obtained from the City of San José's Watershed Protection Division and

the water discharged to the sanitary sewer. For long term discharge (greater than 1-year), the Project Applicant shall obtain a NPDES permit from the Regional Water Quality Control Board (RWQCB) for discharge to the storm system.

Both discharge permits require pre-testing of the water to determine if the water meets the respective City or RWQCB pollutant discharge limits. The water shall be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the Project Applicant shall work with the RWQCB and the City of San José to determine appropriate disposal options and then implement said disposal option. A copy of the discharge permit or NPDES permit, whichever is applicable, shall be submitted to the Director of Planning, Building and Code Enforcement, or their designee prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest).

Noise

PDM NOI-1: Construction Noise Best Management Practices. The Project shall implement the following City of San José Standard Permit Conditions related to construction noise:

- Construct solid plywood fences or similar noise reducing mechanism around construction sites adjacent to operational business, residences, or other noise-sensitive land uses.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors (if any). Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses (if any).
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the Intersection Improvement Area.
- Notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a

written schedule of “noisy” construction activities to adjacent land uses and nearby residences.

- If complaints are received or excessive noise levels cannot be reduced using the measures above, erect a temporary noise control blanket barrier along surrounding building facades that face the construction sites.
- Designate a “disturbance coordinator” who shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to current the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Transportation:

PDM TRN-1: Transportation Demand Management Plan. Prior to the issuance of building occupancy permits, the Project Applicant shall prepare and submit a final Transportation Demand Management (TDM) plan with measures to reduce trips associated with the proposed project. The final TDM Plan shall be submitted to the Director of the Department of Planning, Building, and Code Enforcement and the Director of the Department of Transportation or their designees. The TDM Plan shall include the following measures:

- Provide Commute Trip Reduction Marketing/Education: The project shall implement marketing/educational campaigns for all employees that promote the use of transit, shared rides, and travel through active modes. Strategies may include the incorporation of alternative commute options into new employee orientations, event promotions, and publications.
- Provide Ride Sharing Program: The project shall provide ride-sharing programs by facilitating carpool for interested future employees, achieving at least 10 percent employee participation.

The TDM Plan shall include a trip cap sufficient to reduce trips below the 16.53 VMT per employee threshold for VMT monitoring purposes. The trip cap shall be prepared by a traffic engineer. The monitoring shall be based on annual trip generation counts that demonstrate the vehicle trips generated by the project are within 10 percent of an established peak hour trip cap that is prepared by a traffic engineer. The annual trip monitoring reports shall be submitted that demonstrate that project-generated VMT is below the significance threshold. If

the annual trip monitoring report finds that the project is exceeding the established trip cap, the project shall be required to submit a follow-up report that demonstrates compliance with the trip cap requirements within a period not to exceed six months.

Section 4.0 Environmental Setting, Impacts, and Mitigation

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.11	Land Use and Planning
3.2	Agriculture and Forestry Resources	3.12	Mineral Resources
3.3	Air Quality	3.13	Noise
3.4	Biological Resources	3.14	Population and Housing
3.5	Cultural Resources	3.15	Public Services
3.6	Energy	3.16	Recreation
3.7	Geology and Soils	3.17	Transportation
3.8	Greenhouse Gas Emissions	3.18	Tribal Cultural Resources
3.9	Hazards and Hazardous Materials	3.19	Utilities and Service Systems
3.10	Hydrology and Water Quality	3.20	Wildfire

The discussion for each environmental subject includes the following subsections:

Environmental Setting – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the Project and 2) describes the existing, physical environmental conditions at the Project Site and in the surrounding area, as relevant.

Impact Discussion – This subsection includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts.

- **Project Impacts** – This subsection discusses the Project’s impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Mitigation measures are numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.
- **Cumulative Impacts** – This subsection discusses the Project’s cumulative impact on the environmental subject. Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an environmental impact report (EIR) should discuss cumulative impacts “when the project’s incremental effect is cumulatively considerable.” The discussion does not need to be in as

great detail as is necessary for project impacts, but is to be “guided by the standards of practicality and reasonableness.” The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed Project addressed in this SPPE Application.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130(b)). To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document (CEQA Guidelines Section 15130(b)(1)).

The analysis must determine whether the Project’s contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3). The cumulative impacts discussion for each environmental issue accordingly addresses the following issues: 1) would the effects of all of past, present, and probable future (pending) development result in a significant cumulative impact on the resource in question; and, if that cumulative impact is likely to be significant, 2) would the contribution from the proposed project to that significant cumulative impact be cumulatively considerable?

For each resource area, cumulative impacts may occur over different geographic areas. For example, the project effects on air quality would combine with the effects of projects in the entire air basin, whereas noise impacts would primarily be localized to the surrounding area. The geographic area that could be affected by the proposed project varies depending upon the type of environmental issue being considered. Section 15130(b)(3) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. Table 3.0-2 provides a summary of the different geographic areas used to evaluate cumulative impacts.

Table 4.0-1: Geographic Considerations in Cumulative Analysis

Resource Area	Geographic Area
Aesthetics	Project Site, Intersection Improvement Area, and adjacent parcels
Agriculture and Forestry Resources	Countywide
Air Quality	San Francisco Bay Area Air Basin
Biological Resources	Project Site, Intersection Improvement Area, and adjacent parcels
Cultural Resources	Project Site, Intersection Improvement Area, and adjacent parcels
Energy	Energy provider's territory
Geology and Soils	Project Site, Intersection Improvement Area, and adjacent parcels
GHGs	Planet-wide
Hazards and Hazardous Materials	Project Site, Intersection Improvement Area, and adjacent parcels
Hydrology and Water Quality	Guadalupe River watershed
Land Use and Planning/Population and Housing	Citywide
Minerals	Identified mineral recovery or resource area
Noise and Vibration	Project Site, Intersection Improvement Area, and adjacent parcels
Public Services and Recreation	Citywide
Transportation/Traffic	Citywide
Tribal Cultural Resources	Project Site, Intersection Improvement Area, and adjacent parcels
Utilities and Service Systems	Citywide
Wildfire	Within or adjacent to the wildfire hazard zone

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in San José. Interstate 280 (I-280) from the San Mateo County line to State Route (SR) 17, which includes segments in San José is an eligible, but not officially designated, State Scenic Highway.¹³ In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City Limit.

Local

Envision San José 2040 General Plan

The Envision San José 2040 General Plan (General Plan) includes the following policies that are specific to aesthetic resources and relevant to this analysis:

Policy	Description
CD-1.1	Require the highest standards of architecture and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.
CD-1.12	Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.
CD-1.13	Use design review to encourage creative, high-quality, innovative, and distinctive architecture that helps to create unique, vibrant places that are both desirable urban places to live, work, and play and that lead to competitive advantages over other regions.

¹³ California Department of Transportation. "Scenic Highways." Accessed September 27, 2023.

<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

Policy	Description
CD-1.17	Minimize the footprint and visibility of parking areas. Where parking areas are necessary, provide aesthetically pleasing and visually interesting parking garages with clearly identified pedestrian entrances and walkways. Encourage designs that encapsulate parking facilities behind active building space or screen parked vehicles from view from the public realm. Ensure that garage lighting does not impact adjacent uses, and to the extent feasible, avoid impacts of headlights on adjacent land uses.
CD-1.23	Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.
CD-10.2	Require that new public and private development adjacent to Gateways and freeways (including 101, 880, 680, 280, 17, 85, 237, and 87), and Grand Boulevards consist of high-quality materials, and contribute to a positive image of San José.
CD-10.3	Require that development visible from freeways (including 101, 880, 680, 280, 17, 85, 237, and 87) is designed to preserve and enhance attractive natural and man-made vistas.

City Design Guidelines and Design Review Process

Nearly all new private development is subject to a design review process (e.g., architecture and site planning). The design review process is used to evaluate projects for consistency with adopted design guidelines to assist those involved with the design, construction, review and approval of development in San José. Adopted design guidelines include Residential, Industrial, Commercial, Downtown/Historic, and Downtown Design Guidelines.

City Council Private Outdoor Lighting Policy 4-3

On March 1, 1983, the City of San José implemented the Outdoor Lighting on Private Development policy. The purpose of the policy is to promote energy-efficient outdoor lighting on private development in the City of San José that provides adequate light for nighttime activities, while benefiting from the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

4.1.1.2 *Existing Conditions*

Project Site and Intersection Improvement Areas

The majority of the 28.5-acre Project Site is currently developed with paved parking lots, internal roadways, and landscaped areas that surround an existing industrial facility (Lumileds campus) that is not part of the Project. The portion of the Project Site where DC North would be located was cleared and graded in 2022 in preparation for a previous advanced manufacturing project that did not move forward and remains vacant and undeveloped. The Project Site is visible from US 101, West Trimble Road, Orchard Parkway, and the Guadalupe River trail.

The Intersection Improvement Area is located in the public right-of-way along Orchard Parkway and West Trimble Road and consists of roadway asphalt and transportation infrastructure associated with a signalized intersection.

Surrounding Uses

The Project Site is generally bound to the north by West Trimble Road, to the south by an undeveloped property planned for future development as a data center facility, to the east by Orchard Parkway, and to the west by the Guadalupe Trail and Guadalupe River. Parcels near the Project Site consist primarily of industrial land uses to the north, east and south. Uses to the west include industrial and limited commercial uses across the Guadalupe River. US-101 is approximately 1,100 feet southwest of the Project Site, and the San José Mineta International Airport is approximately 1,350 feet southwest of the Project Site at the nearest point. Overall, development in the vicinity of the Project Site consists predominantly of industrial/office campuses with large surface parking lots and perimeter landscaping, and smaller locally serving commercial uses interspersed throughout.

The Project Site surrounds an occupied industrial facility (Lumileds campus). This campus consists of five main buildings composed of manufacturing facilities, chemical storage areas, wastewater treatment areas, offices, a cafeteria, surface parking lots, recreational facilities, outdoor seating areas, and landscaping. The existing buildings are one- to three-stories in height and exhibit contemporary architectural forms, patterns and building materials.

Scenic Views

The General Plan defines scenic vistas or resources in the City as broad views of the Santa Clara Valley, the hills and mountains surrounding the valley, the urban skyline, and the baylands.¹⁴ Panoramic views of hillside areas, including the foothills of the Diablo Range, Silver Creek Hills, Santa Teresa Hills, and foothills of the Santa Cruz Mountains, are identified as key scenic features in the City. The Project Site and vicinity have minimal to no scenic views of the Diablo foothills to the northeast, Santa Cruz Mountains to the southwest, and Santa Teresa Hills to the south. No natural scenic resources, such as rock outcroppings, are present on-site, within the Intersection Improvement Area, or in the vicinity of the Project Site.

Scenic Corridors

The City's General Plan identifies Gateways and Urban Throughways (urban corridors) where preservation and enhancement of views of the natural and man-made environment are crucial.¹⁵ The nearest Gateway segment to the Project Site (as well as the Intersection Improvement Area) is North First Street from Brokaw Road to Trimble Road, approximately 0.4-mile east of the Project

¹⁴ City of San José. *Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan*. SCH# 2009072096. September 2011. Page 739.

¹⁵ Ibid. Page 717.

Site. Urban Throughways include I-680, I-880, US 101, SR 237, and SR 87. The nearest Urban Throughway to the Project Site (as well as the Intersection Improvement Area) is US 101, located approximately 1,205 feet or 0.2-mile southwest of the Project Site.

Additionally, the City's General Plan identifies Gateways¹⁶ and Rural Scenic Corridors¹⁷ where preservation and enhancement of views of the natural and man-made environment are crucial. Neither the Project Site nor the Intersection Improvement Area is located near the eastern part of the City; therefore, these are not visible from any Rural Scenic Corridor.¹⁸ There are no state-designated scenic highways in San José. The nearest officially designated state scenic highway to the Project Site is SR 9, located approximately 10 miles southwest of the Project Site.¹⁹

Light and Glare

The existing DC North portion of the Project Site is vacant and does not contribute to ambient lighting in the area. The main source of light in the vicinity of the Project Site is parking lot lighting within the developed portion of the Project Site and the existing lighting for the Lumileds campus. Streetlights and other lighting sources are found throughout the vicinity of the Project Site.

The Intersection Improvement Area consists of public right-of-way along Orchard Parkway and Trimble Road. Sources of light and glare along the off-site infrastructure improvement areas and in the area surrounding the Project Site are those typical of developed urban areas, including headlights, streetlights, parking lot lights, security lights, and reflective surfaces such as windows.

4.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on aesthetics, except as provided in Public Resources Code Section 21099, would the project:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

¹⁶ Gateways are locations which announce to a visitor or resident that they are entering the city, or a unique neighborhood. San José has a number of Gateway locations including Coleman Avenue at Interstate 880, 13th Street at US 101, and US 101 in the vicinity of the Highway 85 Interchange. Source: City of San José. *Envision San José 2040 General Plan*. Adopted November 1, 2011. As Amended on January 31, 2024. Chapter 4, Page 25.

¹⁷ A Rural Scenic Corridors are scenic routes that provide access to the natural amenities that surround the City. They are defined as the scenic road right-of-way plus the landscape visible on either side of the right-of-way. Source: City of San José. *San José 2020 General Plan Text*. May 20, 2008. Page 110.

¹⁸ City of San José. "Scenic Corridors Diagram." June 6, 2016. Accessed June 20, 2025.

<https://www.sanjoseca.gov/home/showpublisheddocument/22565/636688980487230000>

¹⁹ California Department of Transportation. "Scenic Highways." Accessed March 10, 2025.

<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?²⁰ If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

4.1.2.1 *Project Impacts*

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

The Project Site is located in an area of North San José primarily developed with industrial and office uses. It would not be located within or adjacent to a scenic vista or viewshed. As discussed in Section 4.1.1.2 Existing Conditions, the closest designated state scenic highway is SR 9, located approximately 10 miles southwest of the Project Site. SR 9 is not visible from the Project Site. Therefore, SR 9 and scenic vistas within this highway would be unaffected by the proposed Project.

The Project would be visible from surrounding roadways, including West Trimble Road and Orchard Parkway, and US 101. The Project would also be visible from the Guadalupe River Trail and nearby properties. The Project would construct two data center buildings with a height of approximately 55.5 feet to the parapet and a maximum height of 72 feet up to the penthouse. The buildings would be situated in the vicinity of the Lumileds campus. While the proposed development may partially block views from existing adjacent businesses and the Guadalupe River Trail, the existing views in the Project area, which is located in a flat, developed urban area, are not considered scenic vistas. Therefore, the Project would not significantly impact any scenic vistas. **(Less than Significant Impact)**

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

The Project Site would not be located along a state scenic highway. The nearest state scenic highway is SR 9, located approximately 10 miles southwest of the Project Site. No scenic resources such as heritage trees, rock outcroppings or historic buildings are present on the Project Site.^{21,22} The Intersection Improvement Area would include removal of pork-chop islands in the rights of way of existing roads (West Trimble Road and Orchard Parkway) that are not identified as state scenic highways. Therefore, the removal of pork-chop islands would not damage scenic resources. To reduce the impact of tree removal, the Project would plant replacement trees in accordance with

²⁰ Public views are those that are experienced from publicly accessible vantage points.

²¹ City of San José. "Heritage Trees." Map. Accessed March 10, 2025.
<https://experience.arcgis.com/experience/98193189cb7443b8a8f1452961b6d935>.

²² City of San José. "Historic Resource Inventory." March 10, 2025.
<https://experience.arcgis.com/experience/4ef3418d9e58451c9c45086ac9a90d6e>.

the City's tree replacement ratios (refer to Section 4.4 Biological Resources). Therefore, the proposed Project would not significantly impact scenic resources. **(Less than Significant Impact)**

- c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
-

The Project Site is within an urbanized area in North San José. The Project, which is consistent with the industrial uses contemplated by the General Plan, would be required to implement the City's North San José Design Guidelines and Industrial Design Guidelines. The proposed Project would be reviewed in accordance with these guidelines during the Planning Permit stage as part of the City's planning and design review. Implementation of the proposed Project, consistent with existing policies, regulations, and adopted plans, would not result in a substantial degradation of the visual character of the area and would not conflict with applicable regulations governing scenic quality. **(Less than Significant Impact)**

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

The Project would include new lighting for security purposes (including outdoor lighting of driveways and walkways) as well as light from vehicles. However, the increase in night lighting from this new development would not significantly increase the ambient light levels in the area, which are already dominated by existing light sources from surrounding industrial/office uses and roadways. Pole-mounted lighting and fixtures included in the Project design would meet the applicable design and height standards of City Lighting Policy 4-3 and would be directed away from the Guadalupe River. The design of the Project would be subject to the City's design review process and would be required to utilize exterior materials that do not result in daytime glare, consistent with relevant General Plan policies and the City's Design Guidelines. Therefore, the proposed Project would have a less than significant light and glare impact. **(Less than Significant Impact)**

4.1.2.2 *Cumulative Impacts*

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

The geographic area for cumulative aesthetic impacts is limited, given the flat topography of the Project Site (as well as the Intersection Improvement Area) and adjacent properties from which the Project Site would be visible. As discussed above, the Project Site is not located along or visible from a designated state scenic highway or a scenic vista. Additionally, the General Plan includes standards, policies, and guidelines to reduce impacts to scenic views and resources.

All cumulative projects (including the Microsoft SJC04 Data Center project that analyzes the PG&E substation expansion and recycled water line extension) occurring in the vicinity of the Project are urban in nature (primarily industrial and office uses) and would be subject to applicable General Plan policies, development standards under the Zoning Code, the design review process to ensure consistency with applicable design guidelines (depending on the proposed use and location), as well as adherence to applicable lighting standards, and signage regulations. By requiring all cumulative projects to adhere to the City's measures, guidelines, and requirements, aesthetic impacts would be minimized or reduced. All cumulative projects would undergo individual review to ensure that site selection, building materials, heights, and lighting is implemented in a manner that does not result in significant visual impacts. For these reasons, there would not be a significant cumulative aesthetic or visual impact. Furthermore, the proposed Project's contribution to this already less than significant cumulative impact would not be cumulatively considerable. **(Less than Significant Cumulative Impact)**

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.²³

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.²⁴

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.²⁵ Programs such as CAL FIRE's Fire and Resource Assessment Program are used to identify whether forest land, timberland, or timberland production areas could be affected are located on or adjacent to a project site.²⁶

²³ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed March 10, 2025.

<http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

²⁴ California Department of Conservation. "Williamson Act." <http://www.conservation.ca.gov/dlrp/lca>.

²⁵ Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

²⁶ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed March 10, 2025. <http://frap.fire.ca.gov/>.

4.2.1.2 *Existing Conditions*

The California Department of Conservation's Important Farmland Map designates the Project Site and its immediate surroundings as Urban Built-Up land.²⁷ Urban Built-Up Land is defined as land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. There is no forest land located on or adjacent to the Project Site and the site is not subject to a Williamson Act contract.²⁸

The Project Site and Intersection Improvement Area are located within an urbanized area of San José. The Project site is designated IP and CIC in the City's General Plan and is zoned IP(PD) and CIC. The Intersection Improvement Area is within the public right of way in Orchard Parkway and West Trimble Road. The Project Site and Intersection Improvement Area are not zoned for agriculture, forestry or timberland nor are any of the surrounding or nearby properties.

4.2.2 Impact Discussion

For the purpose of determining the significance of the project's impact on agriculture and forestry resources, would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- d) Result in a loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

²⁷ California Department of Conservation. "California Important Farmland Finder." Accessed March 10, 2025. <https://maps.conservation.ca.gov/dlrp/ciff/app/>.

²⁸ Santa Clara County. "Williamson Act Properties. Accessed March 10, 2025. <https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce>.

4.2.2.1 *Project Impacts*

- a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
-

As described in Section 4.2.1.2 Existing Conditions, the Project Site is designated as Urban and Built-Up land with no agricultural or farmland on-site. Therefore, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted to non-agricultural uses due to the Project. **(No Impact)**

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

The Project Site is currently zoned CIC and IP(PD), and the Project is not seeking to rezone any lands. The Intersection Improvement Area is located within existing roadways. Thus, the Project would not conflict with any agricultural zoning. The Project Site is also not subject to a Williamson Contract as mentioned in Section 4.2.1.2 Existing Conditions. Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

- c) Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?
-

The Project Site and Intersection Improvement Area are not zoned as, or adjacent to, forest land, timberland, or timberland zoned Timberland Production. Therefore, the Project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

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

The Project Site, Intersection Improvement Area, and the surrounding properties are not zoned as forest land. The Project Site and Intersection Improvement Area are located within an urbanized area and would not result in a loss of forest land or convert forest land to non-forest use. **(No Impact)**

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

As described above, no Farmland or forest land is located on or near the Project Site or Intersection Improvement Area. The Project, therefore, would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

4.2.2.2 *Cumulative Impacts*

Would the project result in a cumulatively considerable contribution to a cumulatively significant agricultural and forestry resources impact?

The geographic area for cumulative agricultural and forestry resource impacts is the County of Santa Clara. The Project would have no impact on agricultural and forestry resources and, therefore, the Project has no potential to combine with other projects to result in cumulative impacts to these resources. **(No Cumulative Impact)**

4.3 Air Quality

This section was prepared by Atmospheric Dynamics, Inc. in accordance with the Commission application requirements for a Small Power Plant Exemption (SPPE) pursuant to the power plant siting regulations, and the rules and regulations of the Bay Area Air District (Air District). This section presents the evaluation of emissions and impacts resulting from the construction and operation of the NTBGF, which supports the NTDC and the NTDC.

Additional modeling data to support the Air Quality and Public Health analyses can be found in Appendix E. The modeling is organized as follows:

- SubAppendix AQ1 – Emissions Data for Criteria Pollutants, Toxic Pollutants, and GHGs
- SubAppendix AQ2 – Equipment Specifications and Emissions Control System Information
- SubAppendix AQ3 – Air Quality Impact Modeling Support Data
- SubAppendix AQ4 – Construction and Miscellaneous Emissions Evaluation and Support Data
- SubAppendix AQ5 – Risk Assessment Support Data

4.3.1 Environmental Setting

Air quality in the San Francisco Bay Area Air Basin (SFBAAB) is typically better than most other areas of the state, due to its proximity to the Pacific Ocean and the weather patterns that dominate the region. The summer climate of the west coast and the Bay Area region is dominated by a semi-permanent high pressure centered over the northeastern Pacific Ocean. Because this high-pressure cell is quite persistent, storms rarely affect the California coast during the summer. Thus, the conditions that persist along the coast of California during summer are a northwest air flow and negligible precipitation. A thermal low-pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the San Francisco Bay Area much of the summer.

The steady northwesterly flow around the eastern edge of the Pacific high-pressure cell exerts a stress on the ocean surface along the west coast. This induces upwelling of cold water from below. Upwelling produces a band of cold water that is approximately 80 miles wide off San Francisco.

Air approaching the California coast, already cool and moisture-laden from its long trajectory over the Pacific, is further cooled as it flows across this cold bank of water near the coast, thus accentuating the temperature contrast across the coastline. This cooling is often sufficient to produce a high incidence of fog and stratus clouds along the Northern California coast in summer.

In winter, the Pacific High weakens and shifts southward, upwelling ceases, and winter storms become frequent. Almost all of the Bay Area's annual precipitation takes place in the November through April period. During the winter rainy periods, inversions are weak or nonexistent, winds are often moderate and air pollution potential is very low. During winter periods when the Pacific high

becomes dominant, inversions become strong and often are surface-based; winds are light and pollution potential is high. These periods are characterized by winds that flow out of the Central Valley into the Bay Area and often include Tule fog.

Air quality is determined by measuring ambient concentrations of criteria pollutants at various locations through a defined region. Degradation, or lack thereof, of air quality is determined by comparing past air concentrations to the current ambient air quality standards and establishing trends for the area in question. Toxic air contaminants (TACs) have no ambient air quality standards, and a health risk assessment (HRA) is typically conducted to evaluate whether risks of exposure to TACs will create an adverse impact.

4.3.1.1 *Existing Air Quality*

In 1970, the United States Congress instructed the United States Environmental Protection Agency (EPA) to establish standards for air pollutants, which were of nationwide concern. This directive resulted from the concern of the effects of air pollutants on the health and welfare of the public. The resulting Clean Air Act (CAA) set forth air quality standards to protect the health and welfare of the public. Two levels of standards were promulgated – primary standards and secondary standards. Primary national ambient air quality standards (NAAQS) are “those which, in the judgment of the administrator [of the EPA], based on air quality criteria and allowing an adequate margin of safety, are requisite to protect the public health (state of general health of community or population).” The secondary NAAQS are “those which in the judgment of the administrator [of the EPA], based on air quality criteria, are requisite to protect the public welfare and ecosystems associated with the presence of air pollutants in the ambient air.” To date, NAAQS have been established for seven criteria pollutants as follows: sulfur dioxide (SO₂), carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sub 10-micron particulate matter (PM₁₀), sub 2.5-micron particulate matter (PM_{2.5}), and lead (Pb).

The criteria pollutants are those that have been demonstrated historically to be widespread and have a potential for adverse health impacts. The EPA developed comprehensive documents detailing the basis of, or criteria for, the standards that limit the ambient concentrations of these pollutants. The State of California has also established ambient air quality standards (AAQS) that further limit the allowable concentrations of certain criteria pollutants. Review of the established air quality standards are undertaken by both the EPA and the State of California on a periodic basis. As a result of the periodic reviews, the standards have been updated (i.e., amended, additions, and deletions) over the ensuing years to the present.

Each federal or state ambient air quality standard is comprised of two basic elements: (1) a numerical limit expressed as an allowable concentration, and (2) an averaging time which specifies the period over which the concentration value is to be measured. Table 4.3-1 presents the current federal and state ambient quality standards.

Table 4.3-1: California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards Concentration	National Standards Concentration
Ozone	1 hour	0.09 ppm (180 µg/m ³)	-
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)
Carbon monoxide (CO)	8 hours	9.0 ppm (10,000 µg/m ³)	9 ppm (10,000 µg/m ³)
	1 hour	20 ppm (23,000 µg/m ³)	35 ppm (40,000 µg/m ³)
Nitrogen dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)
	1 hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)
Sulfur dioxide (SO ₂)	Annual Arithmetic Mean	-	0.030 ppm (80 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)
	3 hours	-	0.5 ppm (1300 µg/m ³)
	1 hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)
Suspended particulate matter or PM ₁₀ (10 micron)	24 hours	50 µg/m ³	150 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	-
Suspended particulate matter or PM _{2.5} (2.5 micron)	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³ (3-year average)
	24 hours	-	35 µg/m ³
Sulfates	24 hours	25 µg/m ³	-
	30 days	1.5 µg/m ³	-
Lead (Pb)	Calendar Quarter	-	1.5 µg/m ³
	Rolling 3-month Average	-	0.15 µg/m ³

ppm = parts per million, ppb=parts per billion, µg/m³ = micrograms per cubic meter (CARB 2016)

Brief descriptions of health effects for the main criteria pollutants are as follows.

Ozone

Ozone is a reactive pollutant, which is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving precursor organic compounds (POC) and oxides of nitrogen (NO_x). POC and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted directly by sources but is formed downwind of sources of POC and NO_x under the influence of wind and sunlight. Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing

shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

Carbon monoxide is a non-reactive pollutant that is a product of incomplete combustion. Ambient carbon monoxide concentrations generally follow the spatial and temporal distributions of vehicular traffic and are also influenced by meteorological factors such as wind speed and atmospheric mixing. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area out to some distance from vehicular sources. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease or anemia, as well as fetuses.

Particulate Matter (PM₁₀ and PM_{2.5})

PM₁₀ consists of particulate matter that is 10 microns or less in diameter (a micron is one-millionth of a meter), and fine particulate matter, PM_{2.5}, which consists of particulate matter 2.5 microns or less in diameter. Both PM₁₀ and PM_{2.5} represent fractions of particulate matter, which can be inhaled into the air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, combustion, and atmospheric photochemical reactions. Some of these operations, such as demolition and construction activities, contribute to increases in local PM₁₀ and PM_{2.5} concentrations, while others, such as stationary source emissions, vehicular traffic, etc. affect regional PM₁₀ and PM_{2.5} concentrations.

Nitrogen Dioxide and Sulfur Dioxide

Nitrogen dioxide (NO₂) and sulfur dioxide (SO₂) are two gaseous compounds within a larger group of compounds, NO_x and sulfur oxides (SO_x), respectively, which are products of the combustion of fuel. NO_x and SO_x emission sources can elevate local NO₂ and SO₂ concentrations, and both are regional precursor compounds to particulate matter. As described above, NO_x is also an ozone precursor compound and can affect regional visibility. (Nitrogen dioxide is the “whiskey brown” colored gas readily visible during periods of heavy air pollution.) Elevated concentrations of these compounds are associated with increased risk of acute and chronic respiratory disease. Additionally, sulfur dioxide and nitrogen oxides emissions can be oxidized in the atmosphere to eventually form sulfates and nitrates, which contribute to acid rain.

Lead

Gasoline-powered automobile engines used to be the major source of airborne lead in urban areas. Excessive exposure to lead concentrations can result in gastrointestinal disturbances, anemia, kidney disease, and in severe cases of neuromuscular and neurological dysfunction. The use of lead

additives in motor vehicle fuel has been eliminated in California, and lead concentrations have declined substantially as a result.

Hydrogen Sulfide

Hydrogen sulfide (H₂S) is a naturally occurring gas contained, as a for-instance, in geothermal steam from the Geysers. H₂S has a “rotten egg” odor at concentration levels as low as 0.005 parts per million (ppm). The state 1-hour standard of 0.03 ppm is set to reduce the potential for substantial odor complaints. At concentrations of approximately 10 ppm, exposure to H₂S can lead to health effects such as eye irritation.

Toxic/Hazardous Air Contaminants

“Toxic air contaminants” (TACs) are air pollutants that are believed to have carcinogenic or adverse non-carcinogenic effects but do not have a corresponding ambient air quality standard. There are hundreds of different types of toxic air contaminants, with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust.

Toxic air contaminants are regulated under both state and federal laws. Federal laws use the term “Hazardous Air Pollutants” (HAPs) to refer to the same types of compounds referred to as TACs under state law. Both terms generally encompass the same compounds, although the California TAC listing is considerably more extensive than the federal HAPs list. For the sake of consistency, this analysis will use TACs when referring to these compounds rather than HAPs. Under the Clean Air Act Amendments of 1990, approximately 190 substances are designated as TACs. Appendix AQ1 presents the annual emissions of the TACs.

Attainment Status

The EPA designates the attainment status of regional areas with respect to federal air quality standards, while the California Air Resources Board (CARB) designates the attainment status of regional areas of California with respect to state air quality standards. Local air districts in California play a vital role in such designations at both levels. These classifications depend on whether the monitored ambient air quality data shows compliance, or non-compliance with the ambient air quality standards, respectively. Unclassified means the area is in attainment or there is insufficient data to determine the classification. The NTBGF site is located within Santa Clara County, under the jurisdiction of the Air District. Table 4.3-2 summarizes the attainment status for each of the criteria pollutants in the Air District with regards to both the federal and state standards.

Table 4.3-2: Attainment Status for the San Francisco Bay Area Air Basin

Pollutant	Averaging Time	Federal Designation	State Designation
Ozone	1 Hour	Marginal Non-Attainment	Non-Attainment
	8 Hour	Non-Attainment	Non-Attainment
CO	1 Hour	Maintenance	Attainment
	8 Hour	Maintenance	Attainment
NO ₂	1 Hour	Attainment	Attainment
	Annual AM	Attainment	Attainment
SO ₂	1 Hour	Attainment	Attainment
	3 Hour	Attainment	Attainment
	24 Hour	Attainment	-
	Annual AM	Attainment	-
PM ₁₀	24 Hour	Attainment	Non-Attainment
	Annual AM	-	Non-Attainment
PM _{2.5}	24 Hour	Attainment	-
	Annual AM	Attainment	Non-Attainment
Lead	30 day Avg	Attainment	Attainment
	Calendar Qtr.	Attainment	-
	Rolling 3 Month Avg	-	-
Visibility Reducing PM (VRP)	8 Hour	-	Unclassified
Sulfates	24 Hour	-	Attainment
H ₂ S	1 Hour	-	Unclassified
Vinyl Chloride	24 Hour	-	No info
Source: Air District website, 2022. (Air District, 2017a)			

Table 4.3-3 provides the background ambient air concentrations of criteria pollutants for the previous three years as measured at certified monitoring stations near the Project Site. To evaluate the potential for air quality degradation as a result of the Project, modeled Project air concentrations are combined with the respective background concentrations as presented in Table 4.3-3 and used for comparison to the NAAQS and CAAQS.

Table 4.3-3: Measured Ambient Air Quality Concentrations by Year

Pollutant	Units	Average Time	Concentration Value Type	2021	2022	2023
Ozone	ppb	1-Hr	CAAQS-1 st Highs/3-year Max	0.098	0.090	0.087
Ozone	ppb	8-Hr	CAAQS-1 st Highs/3-year Max	0.084	0.074	0.068
Ozone	ppb	8-Hr	NAAQS-4 th Highs/3-year Avg	0.072	0.062	0.059
NO ₂	ppb	1-Hr	CAAQS-1 st Highs/3-year Max	47	47	59
NO ₂	ppb	1-Hr	NAAQS-98 th %s/3-year Avg	39	44	44
NO ₂	ppb	Annual	CAAQS/NAAQS-AAM/3-year Max	8.73	9.46	9.28
CO	ppm	1-Hr	CAAQS-1 st Highs/3-year Max	1.7	1.7	1.9
			NAAQS-2 nd Highs/3-year Max	1.6	1.5	1.6
CO	ppm	8-Hr	CAAQS-1 st Highs/3-year Max	1.5	1.4	1.4
			NAAQS-2 nd Highs/3-year Max	1.3	1.3	1.4
SO ₂	ppb	1-Hr	CAAQS-1 st Highs/3-year Max	1.8	2	35.7
			NAAQS-99 th %s/3-year Avg	2	2	2
		24-Hr	CAAQS-1 st Highs/3-year Max	0.7	0.9	1.9
			NAAQS-2 nd Highs/3-year Max	0.5	0.6	0.5
		Annual	CAAQS/NAAQS-AAM/3-year Max	0.17	0.22	0.09
PM ₁₀	µg/m ³	24-Hr	CAAQS-1 st Highs/3-year Max	134	42	41
			NAAQS-2 nd Highs/3-year 4 th High	91	41	41
		Annual	CAAQS-AAM/3-year Max	24.8	20.1	21.3
PM _{2.5}	µg/m ³	24-Hr	NAAQS-98 th %/3-year Avg	23	27	27
		Annual	CAAQS –AAM/3-year Max	8.9	10.1	8.2
			NAAQS-AAM/3-year Avg	8.9	10.1	8.2

Notes: Values for 158 East Jackson Street, San Jose, CA, the nearest Air District monitoring site (all applicable pollutants measured)

Data sources: EPA AIRS website and CARB ADAM (12/2024).

Tables are provided in Appendix E, SubAppendix AQ3 that present a detailed summary of the air quality monitoring data derived from the EPA AIRS and CARB ADAM systems. The values presented in Table 4.3-4 represent the derived background concentrations by pollutant for the established averaging times.

Table 4.3-4: Background Air Quality Data Summary

Pollutant and Averaging Time	AQ Data Value	Units	Background Value (µg/m³)
Ozone – 1-hour Maximum CAAQS	0.098	ppm	192.4
Ozone – 8-hour Maximum CAAQS	0.084	ppm	164.9
Ozone – 3-year average 4 th High NAAQS	0.064	ppm	141.4
PM ₁₀ – 24-hour Maximum CAAQS	134	µg/m ³	134
PM ₁₀ - 24-hour 3-year 4 th High NAAQS	41	µg/m ³	41
PM ₁₀ – Annual Maximum CAAQS	24.8	µg/m ³	24.8
PM _{2.5} – 3-Year Average of Annual 24-hour 98 th Percentiles NAAQS	25.7	µg/m ³	25.7
PM _{2.5} – Annual Maximum CAAQS	10.1	µg/m ³	10.1
PM _{2.5} - 3-Year Average of Annual Values NAAQS	9.1	µg/m ³	9.1
CO – 1-hour Maximum CAAQS	1.9	ppm	2175
CO - 1-hour High, 2 nd High NAAQS	1.6	ppm	1832
CO – 8-hour Maximum CAAQS	1.5	ppm	1718
CO - 8-hour High, 2 nd High NAAQS	1.3	ppm	1603
NO ₂ – 1-hour Maximum CAAQS	59	ppb	111
NO ₂ - 3-Year Average of Annual 98 th Percentile 1-hour Daily Maxima NAAQS	42.3	ppb	80
NO ₂ – Annual Maximum CAAQS/NAAQS	9.46	ppb	17.8
SO ₂ – 1-hour Maximum CAAQS	35.7	ppb	93.4
SO ₂ - 3-Year Average of Annual 99 th Percentile 1-hour Daily Maxima NAAQS	2	ppb	5.2
SO ₂ – 3-hour Maximum NAAQS (Not Available - Used 1-hour Maxima)	35.7	ppb	93.4
SO ₂ – 24-hour Maximum CAAQS	1.9	ppb	5
SO ₂ - 24-hour High, 2 nd High NAAQS	0.9	ppb	1.6
SO ₂ – Annual Maximum NAAQS	0.22	ppb	0.6

Values for 158 East Jackson Street, San Jose, CA, the nearest Air District monitoring site (all applicable pollutants measured). CARB data used for AAM for PM₁₀ for the period 2021-2023.

Conversion of ppm/ppb measurements to µg/m³ concentrations based on:

µg/m³ = ppm x 40.9 x MW, where MW = 48, 28, 46, and 64 for ozone, CO, NO₂, and SO₂, respectively.

4.3.2 Regulatory Background

Federal

At the federal level, EPA is responsible for overseeing implementation of the federal Clean Air Act and its subsequent amendments (CAA). As required by the federal CAA, NAAQS have been established for the criteria pollutants described above.

New Source Performance Standards

The NTBGF will be subject to the applicable New Source Performance Standards (NSPS) standards that are identified below. A description of the applicant's compliance plan to meet each standard is included.

40 CFR Part 60, Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines became effective July 11, 2006. The diesel engines are subject to Subpart IIII. The proposed engines are EPA Tier 2 rated and will be equipped with Best Available Control Technology (BACT) to meet Tier 4 emissions standards.

Compression Ignition (CI) Diesel Engines Emission Standards

Based on 40 CFR 60.4202, emergency CI engines rated at > 560 kW are subject to the emissions standards in 40 CFR 89.112, Table 1, as follows:

- Tier 4 – NO_x = 0.5 g/brake horsepower (bhp)-hour
- Tier 4 – NMHC = 0.14 g/bhp-hour
- Tier 4 – CO = 2.6 g/bhp-hour
- Tier 4 – PM = 0.02 g/bhp-hour

The proposed diesel-fired engines will be equipped with SCR catalyst systems (or equivalents) and DPF which will result in the engines meeting the EPA/CARB Tier 4 emissions standards, as well as the BACT requirements of the Air District for engines rated at greater than 1000 bhp.

40 CFR Part 60 Subpart ZZZZ

The proposed CI engines are exempt from the requirements of Subpart ZZZZ (63.6590 (c)(1)) if the engines comply with the emissions limitations specified in 40 CFR 60 Subpart IIII. See discussion above.

State

California Air Resources Board

The California Air Resources Board (CARB) is the state agency that retains authority to regulate mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The CARB also establishes and revises the CAAQS.

Regional

The Air District is the primary regional agency responsible for attaining and maintaining air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, and enforcement. Examples of the Air District's primary air plans and regulations are described below.

The section briefly describes the regulations which would apply to the NTBGF as set forth in the Air District Rules and Regulations. The Project will require a New Source Review permit with the Air District.

Clean Air Plan

The 2017 Bay Area Clean Air Plan was adopted by the Air District on April 19, 2017, and provides a regional strategy to protect public health and protect the climate. The 2017 Bay Area Clean Air Plan updates the most recent Bay Area ozone plan, as well as the 2010 Clean Air Plan, and is a multi-pollutant air quality plan addressing four categories of air pollutants:

- 1) ozone and the primary ozone precursor pollutants (VOCs and NO_x)
- 2) Particulate matter (PM₁₀ and PM_{2.5}), as well as their precursors
- 3) TACs/HAPs
- 4) Greenhouse gases

Air District Regulation 2, Rule 2 – New Source Review (NSR)

This rule applies to all new or modified sources requiring a Permit to Operate for any new source with actual or potential emissions above the rule trigger limits. The rule also specifies when BACT is required, when offsets are required and the offset ratios, as well the requirements for the required impact analyses, etc.

BACT Requirements (Air District Policy)

A review of BACT for CI-Stationary Emergency Standby engines rated at greater than 1000 BHP (Air District Policy Memo, BACT Determination for Diesel Back-Up Engines Greater than or equal to 1,000 Brake Horsepower, 12/21/2020) indicates that BACT for engines in the stated size range must be in compliance with the EPA Tier 4-Final standards as follows:

- PM 0.02 g/bhp-hour

- $\text{NO}_x = 0.5 \text{ g/bhp-hour}$
- $\text{NMHC} = 0.14 \text{ g/bhp-hour}$
- $\text{CO} = 2.6 \text{ g/bhp-hour}$
- $\text{SO}_2 = \text{fuel sulfur content not to exceed 15 parts per million weight (0.005 g/bhp-hour)}$

The engines proposed for the NTBGF, which are all rated at greater than 1,000 BHP will meet these requirements, so BACT is satisfied.

Additionally, the use of DPF on both engine types will reduce the PM emissions to less than or equal to 0.02 g/bhp-hour (the Tier 4 compliance level).

NSR Offset Requirements

Required emissions offsets as identified in this application will be obtained in compliance with the Regulation 2 Rule 2 NSR rule provisions in Section 302. These provisions are discussed as follows:

- Pursuant to the Air District NSR Rule (Regulation 2 Rule 2), section 2-2-302, offsets must be provided for NO_x or POC (VOC is used in this application), for any source with potential emissions greater than 10 tons/year. For sources which emit NO_x or VOC in excess of 10 (tons per year) tpy but less than 35 tpy, these offsets can be provided by either of the two methods outlined in subsections 302.1.1 or 302.1.2 as follows; (1) the APCO must provide the required offsets from the Small Facility Bank Account, or (2) if the Small Facility Bank Account is exhausted then it is the responsibility of the Applicant to provide the required offsets to mitigate the proposed emissions net increase. VOC emissions from the proposed facility are less than 10 tpy, so VOC offsets are not required under the District NSR rule. NO_x emissions for the proposed facility are greater than 10 tpy but less than 35 tpy, and as such, NO_x offsets must be secured at a ratio of 1.15:1 for any un-offset cumulative increase in emissions. Presently, NO_x offsets cannot be acquired from the Small Facility Offset Bank so the applicant, as required by Air District rules, will supply the offsets through the purchase of emission reduction credits pursuant to option (2) above pursuant to the Air District guidance Policy Memo dated 6/3/2019 (Calculating PTE for Emergency Backup Power Generators).
- Offset mitigation for PM_{10} , $\text{PM}_{2.5}$, and sulfur dioxide emissions is addressed in Section 2-2-303. This section specifies that offsets are only required if the source has the potential to emit any of these pollutants in excess of 100 tons per year. Emissions of PM_{10} , $\text{PM}_{2.5}$, and SO_2 are well below the 100 tpy threshold value, therefore mitigation for emissions at these low emissions levels is not warranted, and such mitigation is not required under Regulation 2 Rule 2.

Air District Regulation 9 Rule 8 – NO_x and CO from Stationary Internal Combustion Engines

- Section 9-8-304 requires that emergency CI engines rated at greater than 175 bhp meet

the following limits (at 15% O₂ dry basis): NO_x 110 ppm and CO 310 ppm. But, Section 9-8-110.5 exempts “emergency standby engines” from this requirement. Therefore, the proposed facility generators will be exempt from this requirement.

- Section 9-8-330 requires that emergency CI engines be limited to non-emergency operations of less than or equal to 50 hours per year. Based on Section 9-8-330, the engines will be limited to no more than 50 hours per year.
- Section 9-8-530 requires that each engine be equipped with a non-resettable totalizing meter, and the following must be logged and reported to the AQMD:
 - a. Total hours run each year
 - b. Total hours of emergency operation per year
 - c. Specify the nature of each emergency operation

Each of the facility generators will be equipped with a non-resettable totalizing meter and the total hours of emergency operation per year and the nature of emergency operations will be documented.

Except as noted for the requirements of Section 9-8-304 above, the proposed engine models will comply with the applicable requirements.

Air District Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants

This rule provides for the review of new and modified sources of TAC emissions to evaluate potential public exposure and health risk. The rule also specifies when toxics-BACT is required, trigger limits for further analysis based on substance specific emissions levels (both short and long term), risk assessment procedures, etc. Emergency standby engines have a limited exemption from Regulation 3 Rule 5 Section 2-5-111 which reads as follows: Limited Exemption, Emergency Standby Engines: This rule shall not apply to toxic air contaminant emissions occurring from emergency use of emergency standby engines (as defined in Regulation 9, Rule 8, Section 231 or the applicable CARB ATCM); or from initial start-up testing; or from emission testing of emergency standby engines required by the Air Pollution Control Officer.

4.3.3 Impact Discussion

For the purpose of determining the significance of the project’s impact on air quality, would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

4.3.3.1 Impact Analysis

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The Commission has considered the air quality thresholds updated by the Air District in April 2023 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The Air District CEQA Air Quality thresholds for criteria air pollutants and fugitive dust used in this analysis are identified in Table 4.3-5. Table 4.3-6 below lists the Air District health risk and hazards thresholds for single-source and cumulative-sources.

Table 4.3-5: Bay Area Air District Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds*	Operation Thresholds	Operation Thresholds
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
ROG and NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

* The Air District recommends for construction projects that require less than one year to complete, lead agencies should annualize impacts over the scope of actual days that peak impacts would occur rather than over the full year. Additionally, for phased projects that results in concurrent construction and operational emissions. Construction-related exhaust emissions should be combined with operational emissions for all phases where construction and operations overlap.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

Table 4.3-6: Bay Area Air District Health Risks and Hazards Thresholds

Health Risk	Single Source	Combined Cumulative Sources
Cancer Risk	10 per one million	100 per one million
Non-Cancer Hazard Index	1.0	10.0
Annual PM _{2.5} Concentration	0.3 µg/m ³	0.8 µg/m ³ (average)

Notes: µg/m³ = micrograms per cubic meter; PM_{2.5}= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Thresholds are applicable to construction and operational activities.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

4.3.3.2 Project Impacts

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

The Project would not conflict with or obstruct the implementation of the applicable air quality plan due to the following:

- The Project will comply with all applicable rules and regulations of the Air District regarding emissions of criteria pollutants.
- The Project will comply with all applicable rules and regulations of the Air District regarding emissions of toxic pollutants.
- The proposed engines at the Project will be certified with or comply with the applicable federal Tier 4 emissions standards for emergency standby electrical generation CI engines.
- The Project will comply with all applicable provisions of the 2017 Air District Air Quality Implementation Plan.
- The Project will obtain and maintain all required air quality related permits from the Air District, and requirements imposed by the Commission.

For these reasons, impacts would be less than significant. **(Less than Significant Impact)**

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

As discussed below in Section 4.3.3.3 Project Emissions, Air Quality Impact Analysis, and Health Risk Assessment, the Project would not result in a cumulatively considerable net increase of any criteria

pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, due to the following:

- The use of best management practices during the construction phase will ensure that the emissions do not result in a cumulative considerable net increase of any non-attainment pollutants. These emissions are generally short term in nature and vary widely from day to day.
- See offset mitigation requirements under the NSR discussion above applicable to operations emissions.

For these reasons, impacts would be less than significant. **(Less than Significant Impact)**

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

The project would not expose sensitive receptors to substantial pollutant concentrations due to the following:

- The air quality impact analysis presented herein shows that the project will not cause or contribute to a violation of any state or federal ambient air quality standard.
- The construction and operational health risk assessments presented herein indicate that the emissions of toxic air contaminants from the Project will not cause a significant risk, as defined using the thresholds presented in Table 4.3-6 above, to any sensitive or non-sensitive receptor with respect to cancer, chronic, or acute impacts.

For these reasons, impacts would be less than significant. **(Less than Significant Impact)**

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

The Project would not result in other emissions or odors that would adversely affect a substantial number of people due to the following:

- Similar facilities, both larger and smaller in scale, have not been identified as sources of odors that would adversely affect off-site receptors.
- The Project is not one of the Project types listed in the Air District CEQA guidelines as producing odors that may affect off-site receptors.
- The applicant has not identified any operational or construction practices, that are planned for use at the Project Site, that would generate substantial amounts of odors that would affect off-site receptors.

For these reasons, impacts would be less than significant. **(Less than Significant Impact)**

4.3.3.3 *Project Emissions, Air Quality Impact Analysis, and Health Risk Assessment*

Project Emissions

Construction

Project construction emissions of CO, VOCs, NO_x, SO₂, PM₁₀, PM_{2.5}, and CO₂e were evaluated. Detailed construction emission calculations are presented in Appendix E, SubAppendix AQ4. Onsite construction emissions from construction of the Project will result from site preparation and grading activities, building erection and parking lot construction activities, “finish” construction activities, and the use of onsite construction equipment. Construction emissions from the Project include emissions from the NTBGF and NTDC. Off-site construction emissions will be derived primarily from materials transport to and from the site, worker travel, etc. Emissions from the continuous approximate 38-month construction period were estimated using the California Emissions Estimator Model (CalEEMod) program. Estimated criteria pollutant construction emissions for the Project are summarized in Table 4.3-7. Construction of the Project is tentatively scheduled to commence in October 2025.²⁹ Construction support data and the CalEEMod analysis output are presented in Appendix E, SubAppendix AQ4. The Air District CEQA Air Quality Guidelines considers exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard to be significant. Air District recommends a 1,000-foot zone of influence around Project boundaries. Since construction activities are typically temporary and mitigation measures as delineated below are proposed to be implemented, and since there are no identified sensitive receptors within 1,000 feet of the site boundary, community risk impacts from construction activities would be less than significant.

²⁹ When the Air Quality and Greenhouse Gas Emissions Assessment was prepared, the construction schedule was assumed to be 38 months with a start date of October 2025. However, as stated in Section 3.3.9.4 Site Grading, Demolition, Excavation and Construction, construction is anticipated to start in January 2026 and take approximately 36 months.

Table 4.3-7: Mitigated Criteria Pollutant Emissions from Construction Activities

Scenario/Year	NO _x	CO	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂ e (metric tons)
Max Construction Year	2027	2026	2027	2026	2027	2027	2026
Max Construction Year (tons)	1.055	4.358	2.910	0.00852	0.391	0.111	851.4
Construction Period (tons/year)	3.08	13.16	3.25	0.026	1.20	0.353	2,583.4
Average Daily Emissions (pounds)	8.00	33.2	22.1	0.065	0.086 Exhaust	0.085 Exhaust	-
Air District Significance Thresholds (pounds/day)	54	-	54	-	82	54	-
Exceeds Thresholds	No	NA	No	NA	No	No	NA

Notes: Construction schedule for the Project is approximately 38 months (maximum), 22 days per avg month, or approximately 858 days. Annual work period is 12 months, 22 days/month, or approximately 264 days. Average daily emissions are based on the max construction year as noted above.

Source: ADI CalEEMod analysis, April 2025 contained in Appendix E, SubAppendix AQ4.

As shown in Table 4.3-7, construction of the Project would not generate VOCs, NO_x, SO_x, PM₁₀ and PM_{2.5} emissions in excess of Air District's numeric significance thresholds. The Air District's CEQA Guidelines consider fugitive dust impacts to be less than significant through the application of best management practices (BMPs). These measures are included in the Project as a PDM.

Air Quality

PDM AIR-1: Fugitive Dust Best Management Practices. To incorporate the Bay Area Air District (Air District) recommendations for Best Management Practices (BMPs) to control fugitive dust, the Project Owner shall implement a construction emissions control plan that has been reviewed and approved by the Director of Planning, Building, and Code Enforcement or the Director's designee prior to the issuance of any grading or building permits, whichever occurs earliest. The Project Owner shall implement the following measures during construction:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All vehicle speeds on unpaved roads shall be limited to 5 mph.
- All new roadways, driveways, and sidewalks shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points.
- Properly tune and maintain all construction equipment in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Post a publicly visible sign with the telephone number and name of the person to contact regarding dust complaints and the Air District telephone number. The contact person shall implement corrective measures, as needed, within 48 hours, and the Air District shall be informed of any legitimate complaints received to verify compliance with applicable regulations.

Operation

Operational emissions of NO_x, VOCs, CO, SO₂, PM₁₀, PM_{2.5}, and GHGs were evaluated. Diesel particulate matter (DPM) which is the approved surrogate representing "whole diesel exhaust" for purposes of health risk evaluations, was the only toxic air contaminant (TAC) considered to result from operation of the Project. Detailed operation emission calculations are presented in Appendix E, SubAppendix AQ1. Primary operation emissions are a result of diesel fuel combustion from the

standby diesel generators, emissions from the building cooling systems, fugitive emissions from fuel storage, and refrigerant use (system leakage). Secondary operational emissions from facility upkeep, such as architectural coatings, consumer product use, landscaping, water use, waste generation, natural gas use for comfort heating, electricity use, off-site vehicle trips for worker commutes and material deliveries were not considered significant. Each of the primary emission sources are described in more detail below.

Stationary Sources

The Project's 42 Caterpillar standby diesel generators will be comprised of the following equipment:

- 40 – CAT C175 diesel-fired engines, each rated at 4,423 HP (3000 kilowatts of electrical power) at 100 percent Load
- 2 – CAT 3512C diesel-fired engines, each rated at 2.360 HP (1600 kilowatts of electrical power) at 100 percent Load

The generators proposed for installation are made by Caterpillar and will incorporate emissions control systems to meet Tier 4 emissions standards. The engines will be equipped with DPF to reduce the diesel particulates to less than or equal to 0.02 grams/brake horse-power hour (g/bhp-hour), and catalyst systems for the control of NO_x, CO, and VOCs. The control systems result in engine emissions compliance with the EPA Tier 4 standards and with Air District BACT. Ammonia slip from the control system will not exceed 10 ppm. All generators would be operated routinely, i.e., readiness and maintenance testing, to ensure that they would function normally during an emergency event.

Each of the data center buildings will be equipped with the following systems to provide cooling for the data center and administrative areas:

- 1 - Addison (PRAK 150) cooling unit – DOAS Admin – using R454B refrigerant, with a system charge of 41 pounds GWP = 466.
- 1 – Addison (PRAK 720) cooling unit – DOAS DC – using R454B refrigerant, with a system charge of 144 pounds GWP = 466.
- 18 – Marley Closed Circuit Cooling Towers (MHF7109EAKBNC3) – 3 fan cells per tower, with a total rated water flow rate at 1782 gallons per minute. These units do NOT use any refrigerants.
- 10 – SMARDT (WE.600.6K) chillers – using R-1234ze refrigerant, with a system charge of 3503 pounds GWP = 1.
- 4 – SMARDT (WE.100.2H) chillers – using R-1234ze refrigerant, with a system charge of 708 pounds GWP = 1.
- 2 – Daikin (REYQ264XBYDA – VRF-CU-Admin) cooling units – using R-32 refrigerant, with a system charge of 129.63 pounds GWP = 675.
- 2 – Daikin (REYQ312XBYDA – VRF-CU-DC) cooling units – using R-32 refrigerant, with a system charge of 129.63 pounds GWP = 675.

Appendix E, SubAppendix AQ1 presents the detailed emissions calculations for the proposed engines, fuel storage tanks, and cooling systems. Appendix E, SubAppendix AQ2 contains the manufacturers specification sheets for the engines, engine add-on air pollution control systems, and the building cooling systems.

During routine readiness testing, criteria pollutants and TACs (as DPM) would be emitted directly from the generators. Criteria pollutant emissions from generator testing were quantified using information provided by the manufacturer, as specified in Appendix AQ1. SO₂ emissions were based on the maximum sulfur content allowed in California diesel (15 parts per million by weight), and an assumed 100 percent conversion of fuel sulfur to SO₂. DPM emissions resulting from diesel stationary combustion were assumed equal to PM_{10/2.5} emissions. For conservative evaluation purposes, it was assumed that testing would occur for no more than 50 hours per year. 50 hours per year per engine is the limit specified by the Airborne Toxic Control Measure for Stationary Toxic Compression Ignition Engines (Title 17, Section 93115, CCR). The Applicant is not proposing a test schedule, i.e., hours versus load points. Testing will be done based upon the Applicants judgment, taking into account the manufacturers recommendations, staff availability, and need. Maintenance and readiness testing may occur at loads ranging from 10 to 100% load. For purposes of this application, emissions were assumed to occur at 100% load. Tables AQ1-1 and AQ1-2 in Appendix E, SubAppendix AQ1 present the engine emissions based upon the 100% load point, number of engines tested, etc. Ammonia emissions, calculated as slip from the SCR on the engines, is also provided in Appendix E, SubAppendix AQ1. The engines were evaluated for the following emissions scenarios:

- CAT C175-16 Engines:
 - Each large engine running for 100 hours per year for Declared Emergency operations, at 100% load, at the guaranteed emissions levels from the Tier 4 control systems.
 - Each large engine running for 50 hours per year for Maintenance and Readiness operations, at 100% load, using composite emissions factors to address both uncontrolled and controlled emissions during such testing.
 - Ammonia slip from the SCR will be limited to 10 ppm.
- CAT 3512C Engines:
 - Each small engine running for 100 hours per year for Declared Emergency operations, at 100% load, at the guaranteed emissions levels from the Tier 4 control systems.
 - Each small engine running for 50 hours per year for Maintenance and Readiness operations, at 100% load, using composite emissions factors to address both uncontrolled and controlled emissions during such testing.
 - Ammonia slip from the SCR will be limited to 10 ppm.

The tables which follow present emissions summaries for the two engines for each of the scenarios noted above in terms of the worst case hourly, daily, and annual emissions. Maximum daily emissions are based on the assumption that only eight of the C175-16 engines will be tested on any day (and the eight engines will not be run concurrently).

Table 4.3-8: Emergency Operations Emissions Summary for CAT C175 and CAT 3512C Engines

Period	NO _x	CO	VOC	SO ₂	PM _{10/2.5}	CO ₂ e
CAT C175						
Max Hourly, pounds	154.36	802.67	43.22	1.54	6.17	-
Max Daily, pounds	3,704.6	19,264.1	1,037.3	37.05	148.19	-
Max Annual, tons	7.72	40.13	2.16	0.08	0.31	7,470.2
C175 as defined above. 100 hours/year emergency operations . 32 engines in operation. The redundant engines are not run during emergencies.						
CAT 3512C						
Max Hourly, pounds	5.29	27.51	1.48	0.05	0.21	-
Max Daily, pounds	126.99	660.3	35.56	1.27	5.08	-
Max Annual, tons	0.26	1.38	0.07	0.003	0.011	244.4
3512C as defined above. 100 hours/year emergency operations. All engines in operation.						

Table 4.3-9: Maintenance and Readiness Testing Emissions Summary for CAT C175 and 3512C Engines

Period	NO _x	CO	VOC	SO ₂	PM _{10/2.5}	CO ₂ e
CAT C175						
Single Engine Max Hourly, pounds	11.27	25.1	1.35	0.048	0.193	-
8 Engines	90.15	200.7	10.8	0.39	1.54	-
Max Daily, pounds						
All Engines	11.27	25.1	1.35	0.05	0.19	4,668.9
Max Annual, tons						
Maintenance/Readiness operations, 50 hours/year, as defined above.						
CAT 3512C						
Single Engine Max Hourly, pounds	6.18	13.76	0.882	0.026	0.106	-
Single Engine	6.18	13.76	0.882	0.026	0.106	-
Max Daily, pounds						
All Engines	0.31	0.69	0.04	0.001	0.005	122.2
Max Annual, tons						
Maintenance/Readiness operations, 50 hours/year, as defined above.						

Table 4.3-10: Emergency Operations Emissions Summary for CAT C175 and CAT 3512C Engines

Period	NO _x	CO	VOC	SO ₂	PM _{10/2.5}	CO _{2e}
CAT C175						
Max Annual, tons	7.72	40.13	2.16	0.08	0.31	7470.2
Emergency Operations						
CAT 3512C						
Max Annual, tons	0.26	1.38	0.07	0.003	0.011	244.4
100 hours/year emergency operations. All engines in operation.						

Table 4.3-11: Maintenance and Readiness Testing Emissions Summary for CAT C175 and CAT 3512C Engines

Period	NO _x	CO	VOC	SO ₂	PM _{10/2.5}	CO _{2e}
CAT C175						
Max Annual, tons	11.27	25.08	1.35	0.05	0.19	4,668.9
Maintenance and Readiness Testing.						
CAT 3512C						
Max Annual, tons	0.31	0.69	0.04	0.001	0.005	122.2
Maintenance and Readiness Testing.						

Table 4.3-12 presents maximum daily and annual emissions data for the various testing scenarios in comparison to the Air District CEQA significance thresholds.

Table 4.3-12: Facility Scenario Emissions and Air District CEQA Significance Levels (Maintenance and Readiness Testing)

Scenario/ Pounds Per Day	NO_x	CO	VOC	SO₂	PM₁₀	PM_{2.5}
Air District CEQA Thresholds	54	NA	54	NA	82	54
Worst Case Daily Engine Emissions ¹	90.15	200.7	10.81	0.386	1.54	1.54
Fuel VOC Losses	-	-	0.0896	-	-	-
Cooling Towers	-	-	-	-	1.356	1.356
Daily Emissions	90.15	200.7	10.9	0.386	3.03	3.03
Significance Threshold Exceeded	Yes	NA	No	NA	No	No
Tons Per Year	NO_x	CO	VOC	SO₂	PM₁₀	PM_{2.5}
Air District CEQA Thresholds	10	AAQS	10	NA	15	10
Fuel VOC Losses	-	-	0.0165	-	-	-
Cooling Towers	-	-	-	-	0.271	0.271
Worst Case Annual Engine Emissions ²	11.58	25.77	1.39	0.051	0.195	0.195
Annual Emissions	11.58	25.77	1.407	0.051	0.466	0.466
Significance Threshold Exceeded	Yes	NA	No	NA	No	No

¹ Based on the emissions for a 8 engine test day (8 - C175 engines).

² Based on the summation of the CAT C175 and CAT 3512C engines.

² CO₂e emissions are 4791 tons per year (4,345.6 metric tons/year) from Maintenance and Readiness Testing.

Fuel Storage (Working and Breathing) VOC Emissions

Each of the large CAT C175-16 engines will be equipped with an approximate 6000 gallon belly storage tank, while each of the CAT 3512C engines will be equipped with an approximate 4000 gallon belly storage tank. VOC working and breathing losses (for the 42 proposed tanks) are presented in Appendix E, SubAppendix AQ1, and summarized as follows:

- Total VOC losses = 0.0165 tpy or 32.7 pounds/year or 0.0896 pounds/day.

Building Cooling Systems (Marley CCCTs)

Emissions of PM₁₀/2.5 from the cooling tower systems are as follows:

- 0.062 pounds/hour, 1.486 pounds/day, and 0.271 tpy

These values are included in Table 4.3-12 above.

GHG Emissions from Refrigerant Use

GHG emissions from the cooling systems using refrigerants are as follows:

- 11.852 tpy, or 10.75 metric tons/year

SF₆ Use in Electrical Breakers

SF₆ Emissions resultant from electrical breaker leakage are as follows:

- 35.2 metric tons/year

The following should be noted with respect to Table 4.3-12 above.

- NO_x emissions exceed the Air District CEQA significance levels on the days when the 8 engine Maintenance and Readiness tests occur, and on a TPY basis (total emissions from all engines).
- The emissions of NO_x may be mitigated through the participation in the Air District ERC Bank, or other alternative methods as negotiated with the Air District.

Table 4.3-13 presents the summation of emissions for all engines for the maximum of the scenarios noted above (i.e., the 150 hours per year) criteria per the Air District permitting policy criteria.

Table 4.3-13: Air District 150 Hours per Year Emissions Summation (Tons per Year)

Engines	NO _x	CO	VOC	SO ₂	PM _{10/2.5}	CO ₂ e
CAT C175 + CAT 3512C	19.56	67.28	3.63	0.13	0.518	12,506

Note: Summation for both engines types.

These values are NOT the NSR offset applicability values.

Table 4.3-14 presents data on the DPM emissions levels (worst case) for both models of engines.

Table 4.3-14: Toxic Air Contaminant (DPM) Emissions from the Proposed Engines (Per Engine Basis)

Scenario/ DPM Emissions	CAT C175	CAT 3512C
Maximum Annual, pounds	9.65	5.30
Maximum Hourly, pounds	0.193	0.106

Notes: DPM is the approved surrogate compound for diesel fuel combustion for purposes of health risk assessment. Annual emissions for each engine are based on the max allowed runtime of 50 hours per year, Maintenance and Readiness testing as defined.

Table 4.3-15 presents the hourly and annual fuel use values for the Maintenance and Readiness operational scenario as outlined above.

Table 4.3-15: Engine Fuel Use Values

Scenario/ Fuel Use, gallons (per engine basis)	CAT C175	CAT 3512C
Maximum Hourly, gallons	209.01	109.4
Maximum Annual, gallons	10,455	5,470
Total Annual Fuel Use (All Engines)		
Annual Fuel Use, gallons	429,140	

Miscellaneous Operational Emissions

Miscellaneous emissions from NTDC/NTBGF operational activities (subsequent to full buildout) such as worker travel, deliveries, energy and fuel use for facility electrical, heating and cooling needs, periodic use of architectural coatings, landscaping, etc. were evaluated by CalEEMod. These emissions are presented in Table 4.3-16.

Table 4.3-16: Miscellaneous Operational Emissions

Scenario/Pounds per Day	NO_x	CO	VOC	SO₂	PM₁₀ Exhaust	PM_{2.5} Exhaust
Average Daily Emissions	2.1	4.0	10.8	0.016	0.14	0.14
Air District CEQA Thresholds	54	NA	54	NA	82	54
Exceeds Thresholds	No	NA	No	NA	No	No
Scenario/Tons per Year						
Annual Emissions	0.38	0.73	1.97	0.003	0.026	0.026
Air District CEQA Thresholds	10	NA	10	NA	15	10
Exceeds Thresholds	No	NA	No	NA	No	No

Note: Assumes the full buildout and data center is manned 365 days/year. This table does NOT include the emissions from the emergency engines. All source category includes, mobile worker travel, deliveries, energy use, fuel use, waste disposal, water use, and miscellaneous area sources.

Source: ADI CalEEMod analysis, April 2025, Appendix E, SubAppendix AQ4.

GHG Operations Emissions

A summary of GHG operational emissions is as follows:

- Miscellaneous Operations (Area, energy, mobile, waste, water) = 1,230.1 metric tons CO₂e/year
- Emergency Engines (Maintenance and Readiness Testing only) = 4,345.6 metric tons CO₂e/year
- Refrigerant leakage emissions = 10.75 metric tons CO₂e/year
- SF₆ Breaker emissions = 35.2 metric tons CO₂e/year
- 99.5 MW of energy use, 8,760 hours/year, PG&E Carbon Intensity Factor 204 pounds CO₂/MW-hour = 80,639.7 metric tons CO₂e/year³⁰

Total CO₂e emissions from facility operations are: 5,621.7 metric tons CO₂e/Year. This value is below the Air District significance level of 10,000 metric tons/year for operations of stationary sources.

Air Quality Impact Analysis

Modeling Overview

The evaluation of the potential air quality impacts and health risks were based on the estimate of the ambient air concentrations that could result from NTBGF air emission sources. This section discusses the selection of the dispersion model, the data that was used in the dispersion model (pollutants modeled with appropriate averaging times, source characterization, building downwash, terrain, and meteorology), etc.

Assessments of ambient concentrations resulting from pollutant emissions (called air quality impacts) are typically conducted using EPA-approved air quality dispersion models. These models are based on mathematical descriptions of atmospheric diffusion and dispersion processes in which a pollutant source impact can be calculated over a given area and for a specific period of time (called averaging period). By using mathematical models, the assessment of emissions can be determined for both existing sources as well as future sources not yet in operation. Inputs required by most dispersion models, which must be specified by the user, include the following:

- Model options, such as averaging time to be calculated;

³⁰ Note: The emissions noted above (i.e., 80,639.7 metric tons CO₂e/year) are not emitted at the project facility. These emissions result from power generation across the PG&E system, and as such they are reported by PG&E on a specific generating facility basis. These emissions are not part of the project facility inventory. In addition, it should not be implied that “new” generation capacity will be required to be added to the PG&E system to supply the data center needs.

- Meteorological data, used by the model to estimate the dispersion conditions experience by the source emissions;
- Source data, such as source location and characteristics – stack emissions like those considered here are modeled as “point” sources, which require user inputs of the release height, exit temperature and velocity, and stack diameter (used by the dispersion model to estimate the mechanical and buoyant plume rise that will occur due to the release of emissions from a stack); and
- Receptor data, which are the location(s) of the given area where ambient concentrations are to be calculated by the dispersion model.

Model Selection

To estimate ambient air concentrations, the latest version of the AERMOD (Version 24142) dispersion model was used. AERMOD is appropriate for use in estimating ground-level short-term ambient air concentrations resulting from non-reactive buoyant emissions from sources located in simple, intermediate, and complex terrain. AERMOD is the preferred guideline model recommended by EPA for these types of assessments and is based on conservative assumptions (i.e., the model tends to over-predict actual impacts by assuming steady state conditions, no pollutant loss through conservation of mass, no chemical reactions, etc.). AERMOD is capable of assessing impacts from a variety of source types such as point, area, line, and volume sources (as noted above, point source types are used to model stack sources like the NTBGF engine emissions); downwash effects; gradual plume rise as a function of downwind distance; time-dependent exponential decay of pollutants; and can account for settling and dry deposition of particulates (all NTBGF emissions were conservatively modeled as non-reactive gaseous emissions). The model is capable of estimating concentrations for a wide range of averaging times (from one hour to the entire period of meteorological data provided).

AERMOD calculates ambient concentrations in areas of simple terrain (receptor base elevations below the stack release heights), intermediate terrain (receptor base elevations between stack release and final plume height), and complex terrain (receptor base elevations above final plume height). AERMOD assesses these impacts for all meteorological conditions, including those that would limit the amount of final plume rise. Plume impaction on elevated terrain, such as on the slope of a nearby hill, can cause high ground level concentrations, especially under stable atmospheric conditions. Due to the relatively flat nature of the NTBGF Project terrain area, including the surrounding properties, plume impaction effects would not be expected to occur. AERMOD also considers receptors located above the receptor base elevation, called flagpole receptors.

Another dispersion condition that can cause high ground level pollutant concentrations is caused by building downwash. Building downwash can occur during high wind speeds or a building or structure is in close proximity to the emission source. This can result in building wake effects where the plume is drawn down toward the ground by the lower pressure region that exists in the lee side

(downwind) of the building or structure. This AERMOD feature was also used in modeling the NTBGF emission sources as described later.

Model Input Options

Model options refer to user selections that account for conditions specific to the area being modeled or to the emissions source that needs to be examined. Examples of model options selected for this analysis includes the use of multiple flagpole heights for each receptor modeled and the urban dispersion option (using a Santa Clara County population of approximately 1.94 million). Land use in the immediate area surrounding the Project Site is characterized as “urban”. This is based on the land uses within the area circumscribed by a three (3) km radius around the Project Site, which is greater than 50 percent urban. Therefore, in the modeling analyses, the urban dispersion option was selected.

AERMOD also supplies recommended defaults for the user for other model options. This analysis was conducted using AERMOD in the regulatory default mode, which includes the following additional modeling control options:

- adjusting stack heights for stack-tip downwash,
- using upper-bound concentration estimates for sources influenced by building downwash from super-squat buildings,
- incorporating the effects of elevated terrain,
- employing the EPA-recommended calms processing routine, and
- employing the EPA-recommended missing data processing routine.

Calculation of chemical concentrations for use in the impact and exposure analysis requires the selection of appropriate concentration averaging times. Average pollutant concentrations ranging from one hour to annual based on the meteorological data were calculated for each NTBGF source and the facility in total.

According to the Auer land use classification scheme, a 3 km radius boundary around the proposed site yields a predominately “urban” classification. This is consistent with the current land use and zoning designation for the site and surrounding area as “commercial, and light and heavy industrial.”

Meteorological Data – Modeling Inputs

AERMOD requires a meteorological input file to characterize the transport and dispersion of pollutants in the atmosphere. Surface and upper air meteorological data inputs, along with surface parameter data describing the land use and surface characteristics near a site, are used as inputs into the AERMET meteorological preprocessor. The output files generated by AERMET consist of the surface and upper air meteorological input files required by AERMOD.

AERMOD uses hourly meteorological data to characterize plume dispersion. AERMOD calculates the dispersion conditions for each hour of meteorological data for the emission sources modeled at the user-specific receptor locations. The resulting 1-hour impacts are then averaged by AERMOD for the averaging time(s) specified by the user (accounting for calm winds and missing meteorological data as specified in the model options). Meteorological data from the San José International Airport were provided by the Air District for the five years of 2013 through 2017, inclusive. The representativeness of the meteorological data is dependent on the proximity of the meteorological monitoring site to the area under consideration; the complexity of the terrain, the exposure of the meteorological monitoring site, and the period of time during which the data are collected. The data was collected approximately three (3) kilometers from the eastern edge of the NTBGF Project boundary and were provided by Air District as the most appropriate meteorological data for this modeling analysis. The data were processed by Air District with AERMET (version 18081), AERMOD's meteorological data preprocessor module.

The Air District NTBGF meteorological data consists of surface measurements including wind speed, wind direction, temperature, and solar radiation, which were combined with National Weather Service upper air data from the Oakland International Airport. The EPA-recommended 90% completeness criteria are met for all modeled parameters in the Air District meteorological data.

Building Downwash and Receptors – Modeling Inputs

The effects of building downwash on facility emissions were included in the modeling assessment. The **Plume Rise Model Enhancements** to the EPA **Building Profile Input Program (BPIP-PRIME, version 04274)** was used to determine the direction-specific building downwash parameters. The PRIME enhancements in AERMOD calculate fields of turbulence intensity, wind speed, and slopes of the mean streamlines as a function of projected building shape. Using a numerical plume rise model, the PRIME enhancements in AERMOD determine the change in plume centerline location and the rate of plume dispersion with downwind distance. Concentrations are then predicted by AERMOD in both the near and far wake regions, with the plume mass captured by the near wake treated separately from the uncaptured primary plume and re-emitted to the far wake as a volume source. Figure AQ3-1 in Appendix E, SubAppendix AQ3 presents the building data used in the downwash analysis as well as the emergency generator stack locations and the rooftop chiller locations.

Receptor grids were generated along the fence line (≤ 10 meter spacing), from the fence line to 300 meters (20 meter spacing), from 300 meters to one kilometer (km) (50-meter spacing), from 1.0 to 5.0 km (200-meter spacing). If any of the maximum impacts occurred on receptors with spacing greater than 20 meters, a refined grid with 20-meter resolution would be created and extended outwards by 500 meters in all directions. All receptor and source locations are referenced in meters using the Universal Transverse Mercator (UTM) Cartesian coordinate system based on the North American Datum of 1983 (NAD83) for Zone 10.

The latest version of AERMAP (version 24142) was used to determine receptor elevations and hill-slope factors utilizing USGS's 1-degree square National Elevation Dataset (NED). NED spacings were 1/3 inches (approximately 10 meters) for the fence line, 20-meter, 50-meter, and 100-meter spaced receptor grids and 1 inches (approximately 30 meters) for 200-meter and 500-meter spaced receptor grids and sensitive receptors. Flagpole receptors were generated for the two- and three-story residential areas just north of the Project area. Electronic copies of the BPIP-PRIME and AERMAP input and output files, including the NED data, are included with the application will be submitted to Staff electronically. Figure AQ3-2 in Appendix E, SubAppendix AQ3 presents the receptor grids used in the modeling analyses.

Source Data – Modeling Inputs

Emissions and stack parameters for the 36 Caterpillar diesel engines are presented in Appendix E, SubAppendix AQ-1 and AQ-3 and were used to develop the modeling inputs. Stack parameters (e.g., stack height, exit temperature, stack diameter, and stack exit velocity) were based on the parameters given by the engine manufacturer and the Applicant. Stack locations for the proposed sources were matched to show their actual location based on the proposed facility plot plan. Appendix E, SubAppendix AQ-3 presents the locations of the NTBGF sources, and the building outlines considered in the downwash analysis. Stack base elevations were given a common base elevation based on the range of elevations calculated with AERMAP for the stack locations.

Impact Analysis Summary

Operation

Operational characteristics of the diesel engines, such as emission rate, exit velocity, and exit temperature, vary by operating loads. The engines could be operated over a range of load conditions from one to 100 percent. Based on similar projects, the 100% load case always produces the maximum ground-based concentrations. Thus, an air quality screening analysis was not performed. The engines were assumed to be tested anytime from 7 AM to 5 PM (controlled using the EMISFACT/HROFDY model option). Although the engines will typically only be tested individually for up to one hour at any one time, each engine was assumed to operate up to 8 hours/day (7AM-5PM) to conservatively represent 8 different engines operating one hour each in any one day for 3-hour, 8-hour, and 24-hour averaging times. Thus, the worst-case stack condition and the worst-case engine location could be determined from the screening analysis. All 42 engines were assumed to be tested for annual averages, with emissions proportioned accordingly. The screening results are presented in Appendix E, SubAppendix AQ3.

Based on the results of the screening analyses, all NTBGF sources were modeled in the refined analyses for comparisons with the annual CAAQS and NAAQS and the short-term NAAQS with multi-year statistical forms (1-hour NO₂ and SO₂ and 24-hour PM_{2.5} and PM₁₀). Impacts during normal testing operations were based on the worst-case screening condition. Since the engines will each be tested far less than 100 hours/year, the annual average emission rate was included in 1-hour NO₂ and SO₂ NAAQS modeling analyses at the annual average emission rates per EPA guidance due to

the statistical nature of these standards (it was the engines were modeled at the maximum 1-hour emission rate for the CAAQS).

For the 1-hour NO₂ modeling assessments, the Ambient Ratio Method Version 2 (ARM2) was used in the modeling analyses with an in-stack NO₂/NO_x ratio of 0.5 (50%) based on EPA Guideline requirements. This is conservative as the NO₂/NO_x ratios for these types of engines are on the order of 10%, as per the EPA's ISR database.

The highest NO₂ background data over the last three (3) years from the 158 East Jackson Street monitoring site was used to assess the CAAQS, which was then added to the modeled NO₂ concentration for the 1-hour CAAQS assessment. The three-year average of the second-highest hourly value for the same three (3) year period were added to the modeled NO₂ concentration for the NAAQS assessment. Assessment with the CAAQS is based on the maximum 1-hour NO₂ concentration (with and without background). NO₂ NAAQS compliance based on the five-year average of the 98th percentile daily maximum annual 1-hour impacts with background concentration (NO₂ SIL for NAAQS compliance based on 5-year average of the annual 1-hour maximum impacts without background concentrations).

Based on the results of the modeling analyses, the modeled concentrations are presented in Table 4.3-17. Note that the annual maximum PM_{2.5} concentration is less than the significance impact level (SIL) of 0.13 ug/m³. Therefore, the Project will not cause or contribute to any exceedances of the annual PM_{2.5} standard.

Table 4.3-17: Modeled Operational Concentrations and Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Concentration (µg/m³)	Background (µg/m³)	Total (µg/m³)	Ambient Air Quality Standards (µg/m³)	
					CAAQS	NAAQS
3-/8-/24-Hour Maxima shown for one engine operating up to 10 hours/day (7AM-5PM)						
NO ₂ *	1-hour maximum (CAAQS)	121.01	111	232.01	339	-
	3-year average of 1-hour yearly 98th % (NAAQS)**	2.46	80	82.46	-	188
	Annual maximum	1.7	17.8	19.50	57	100
CO	1-hour maximum	419.49	2,175	2,594.5	23,000	40,000
	8-hour maximum	301.25	1,718	2,019.3	10,000	10,000
SO ₂	1-hour maximum (CAAQS)	0.8	93.4	94.2	655	-
	3-year average of 1-hour yearly 99th % (NAAQS)**	0.01	5.2	5.2	-	196
	24-hour maximum	0.19	5	5.19	105	365
	Annual maximum	0.01	0.6	0.61	-	80

PM ₁₀	24-hour maximum (CAAQS)	0.77	134	134.77	50	-
	24-hour 4 th highest over 5 years (NAAQS)	0.68	41	41.7	-	150
	Annual maximum (CAAQS)	0.04	24.8	24.84	20	-
PM _{2.5}	3-year average of 24-hour yearly 98th %	0.53	25.7	26.23	-	35
	Annual maximum (CAAQS)	0.04	10.1	10.14	12	-
	3-year average of annual concentrations (NAAQS)	0.03	9.1	9.13	-	12.0

*1-hour NO₂ impacts evaluated with Ambien Ratio Method #2 (ARM2), with the maximum hourly background added in separately. Annual NO₂ impacts evaluated with ARM2. Modeling utilized EPA-default minimum/maximum NO₂/NO_x ambient ratios of 0.5/0.9.

** Impacts for the 1-hour statistical-based NO₂ and SO₂ NAAQS are based on the annual average emissions per EPA guidance documents for intermittent sources like emergency generators. Impacts for the 1-hour NO₂ and SO₂ CAAQS are based on the 1-hour emission rate since these CAAQS are “values that are not to be exceeded”.

Construction

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the Project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}. The closest sensitive receptors to the Project Site are residences located north-northwest of the Project boundary. Emissions and dispersion modeling were conducted to predict the off-site concentrations resulting from Project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

In addition, during excavation, grading, and some building construction activities, substantial amounts of dust could be generated. Most of the dust would result during grading activities. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed at any given time, amount of activity, soil conditions, and meteorological conditions. To address fugitive dust emissions that lead to elevated PM₁₀ and PM_{2.5} levels near construction sites, the Air District CEQA Air Quality Guidelines identify best management practices. Once included in construction projects, these impacts will be considered less than significant. In addition, diesel emissions from construction related equipment will temporarily result in an increase in health risk to nearby off-site receptors.

For modeling fugitive PM₁₀ and PM_{2.5} emissions, a near-ground level release height of 0.5 meters (1.6 feet) was used for the area source. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area source. To represent the construction equipment exhaust emissions, 103 equally spaced (25 meter) point sources were placed within the area of construction activity. Each point source had an emission release height of 3.05 meters (10 feet). The exit temperature and stack velocity were based on an average sized construction engine that could be used for the Project. Construction emissions were modeled as occurring daily between 7 AM to 5PM, when the majority of construction activity would occur. Appendix E, Figure AQ4-1 presents the point source and fugitive dust sources that were included in AERMOD.

Table 4.3-18: Modeled Construction Concentrations and Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Concentration (µg/m³)	Background (µg/m³)	Total (µg/m³)	Ambient Air Quality Standards (µg/m³)	
					CAAQS	NAAQS
Construction occurs for up to 10 hours/day (7AM-5PM)						
NO ₂ *	1-hour maximum (CAAQS)	2.2	111	113.2	339	-
	3-year average of 1-hour yearly 98th % (NAAQS)	1.6	80	81.6	-	188
	Annual maximum	0.27	17.8	18.07	57	100
CO	1-hour maximum	10	2175	2185	23,000	40,000
	8-hour maximum	4.7	1718	1722.7	10,000	10,000
SO ₂	1-hour maximum (CAAQS)	0.020	93.4	93.42	655	-
	3-year average of 1-hour yearly 99th % (NAAQS)	0.016	5.2	5.22	-	196
	24-hour maximum	0.0044	5	5.0044	105	365
	Annual maximum	0.0024	0.6	0.6024	-	80
PM ₁₀	24-hour maximum (CAAQS)	1.9	134	135.9	50	-
	24-hour H6H (NAAQS)	1.7	41	42.7	-	150
	Annual maximum (CAAQS)	0.81	24.8	25.61	20	-
PM _{2.5}	3-year average of 24-hour yearly 98th %	0.36	25.7	26.06	-	35
	Annual maximum (CAAQS)	0.22	10.1	10.32	12	-
	3-year average of annual concentrations (NAAQS)	0.20	9.1	9.30	-	9.0
*1-hour NO ₂ impacts evaluated with Ambien Ratio Method #2 (ARM2), with the maximum hourly background added in separately. Annual NO ₂ impacts evaluated with ARM2. Modeling utilized EPA-default minimum/maximum NO ₂ /NO _x ambient ratios of 0.5/0.9.						

-
- 1 - Maximum 8th-highest max daily 1-hr results averaged over 5 years
 - 2 - Maximum 4th-highest
 - 3 - Maximum 8th-highest 24-hr results averaged over 5 years
 - 4 - Maximum annual results averaged over 5 years
-

Based on the modeling results in Table 4.3-17 and Table 4.3-18, the only combined modeled impacts and background concentrations greater than the standards are for the 24-hour and annual PM₁₀ CAAQS and the 24-hour PM_{2.5} NAAQS and annual PM_{2.5} CAAQS. These exceedances are only because the background concentrations already exceed the standards. Modeled Project impacts in these instances are less than the EPA and/or Air District significance levels and thus, the Project will not cause or contribute to an exceedance of any air quality standard for any averaging time period. The Project will therefore comply with the CAAQS and NAAQS.

Public Health and Health Risk Assessment

This section presents the methodology and results of a human health risk assessment performed to assess potential impacts and public exposure associated with airborne emissions from the routine operation of the Project.

Air will be the dominant pathway for public exposure to chemical substances released by the Project. Emissions to the air will consist primarily of combustion byproducts produced by the diesel-fired emergency standby engines. Potential health risks from combustion emissions will occur almost entirely by direct inhalation. To be conservative, additional pathways were included in the health risk modeling; however, direct inhalation is considered the most likely exposure pathway. The risk assessment was conducted in accordance with guidance established by the California Office of Environmental Health Hazard Assessment and CARB

Combustion byproducts with established CAAQS or NAAQS, including NO_x, CO, SO₂ and PM_{10/2.5} were addressed in the previous Air Quality Section.

Affected Environment

Sensitive receptors are defined as groups of individuals that may be more susceptible to health risks due to chemical exposure. Schools (public and private), day care facilities, convalescent homes, and hospitals are of particular concern. The nearest sensitive receptors, by type, are listed in Table 4.3-19. There are no sensitive receptors within 1,000 feet of the facility boundary. Appendix E, SubAppendix AQ5 contains support materials for the facility health risk assessment, including a listing of sensitive receptors within the facility regional area. HAPs emissions evaluations are presented in Appendix E, SubAppendix AQ1.

Table 4.3-19: Sensitive Receptors Nearfield of the NTBGF Site

Receptor Type	UTM Coordinates	Distance from Site, feet	Distance from Site, miles
Nearest Residences	593704, 4138583	3,257	0.62
Nearest Hospital	588739, 4132589	24,572	4.65
Nearest School	593335, 4138552	3,926	0.74
Nearest Daycare	N/A	-	-
Nearest Convalescent Home	N/A	-	-
Nearest College/Univ.	594248, 4134096	11,891	2.25

Source: Google Earth Image 8/2023. All coordinates are approximate.

The receptors noted above should not be assumed to represent the maximum impact locations based on receptor type. For example, the nearest residence noted in the table may not be the maximum impacted residence on the modeling grid.

The nearest residences are located to the north-northeast of the site at a distance of approximately 0.62 miles. Another set of residences are located to the southeast of the site, also at a distance of approximately 1.81 miles.

Air quality and health risk data presented by CARB in the 2013 Almanac of Emissions and Air Quality (latest version available, CARB 2013) for the state shows that over the period from the mid-1990s through 2013, the average concentrations for DPM have been substantially reduced, and the associated health risks for the state are showing a steady downward trend as well. This same trend has occurred in the Air District.

Environmental Consequences

Cancer Risk

Cancer risk is the probability or chance of contracting cancer over a period of time normally defined as either 30 or 70-years depending on the project type and agency risk procedures. Carcinogens are not assumed to have a threshold below which there would be no human health impact. In other words, any exposure to a carcinogen is assumed to have some probability of causing cancer; the lower the exposure, the lower the cancer risk (i.e., a linear, no-threshold model). Under various state and local regulations, an incremental cancer risk greater than 10-in-one million due to a project is considered to be a significant impact on public health. For example, the 10-in-one-million risk level is used by the Air Toxics Hot Spots (AB 2588) program and California's Proposition 65 as the public notification level for air toxic emissions from existing sources.

Non-Cancer Risk

Non-cancer health effects can be either chronic or acute. In determining potential non-cancer health risks (chronic and acute) from air toxics, it is assumed there is a dose of the chemical of

concern below which there would be no impact on human health. The air concentration corresponding to this dose is called the Reference Exposure Level (REL). Non-cancer health risks are measured in terms of a hazard quotient, which is the calculated exposure of each contaminant divided by its REL. Hazard quotients for pollutants affecting the same target organ are typically summed with the resulting totals expressed as hazard indices for each organ system. A hazard index of less than 1.0 is considered to be an insignificant health risk. For this health risk assessment, all hazard quotients were summed regardless of target organ. This method leads to a conservative (upper bound) assessment. RELs used in the hazard index calculations were those published in the CARB/OEHHA listings dated October 2020.

Chronic toxicity is defined as adverse health effects from prolonged chemical exposure, caused by chemicals accumulating in the body. Because chemical accumulation to toxic levels typically occurs slowly, symptoms of chronic effects usually do not appear until long after exposure commences. The lowest no-effect chronic exposure level for a non-carcinogenic air toxic is the chronic REL. Below this threshold, the body is capable of eliminating or detoxifying the chemical rapidly enough to prevent its accumulation. The chronic hazard index was calculated using the hazard quotients calculated with annual concentrations.

Acute toxicity is defined as adverse health effects caused by a brief chemical exposure of no more than 24 hours. For most chemicals, the air concentration required to produce acute effects is higher than the level required to produce chronic effects because the duration of exposure is shorter. Because acute toxicity is predominantly manifested in the upper respiratory system at threshold exposures, all hazard quotients are typically summed to calculate the acute hazard index. One-hour average concentrations are divided by acute RELs to obtain a hazard index for health effects caused by relatively high, short-term exposure to air toxics. Since this assessment considers only DPM, and DPM has no acute REL, acute HI values were not calculated. The following receptor descriptors are used herein:

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

Construction and Operational Phase Impacts

Environmental consequences potentially associated with the project are potential human exposure to chemical substances emitted into the air. The human health risks potentially associated with these chemical substances were evaluated in a health risk assessment. The chemical substance potentially emitted to the air from the proposed facility is DPM. DPM is the approved surrogate compound for diesel fuel combustion pursuant to CARB and EPA.

Emissions of criteria pollutants will adhere to NAAQS or CAAQS as discussed in the Ambient Air Quality section. The proposed facility emergency electrical backup engines will be either certified or compliant Tier 4 units and as such, they meet the BACT requirements of the Air District. These engines are equipped with DPFs. Finally, air dispersion modeling results show that emissions will not result in concentrations of criteria pollutants in air that exceed ambient air quality standards (either NAAQS or CAAQS). These standards are intended to protect the general public with a wide margin of safety. Therefore, the Project is not anticipated to have a significant impact on public health from emissions of criteria pollutants.

Potential impacts associated with emissions of toxic pollutants to the air from the proposed facility were addressed in a health risk assessment, with support data presented in Appendix AQ5. The risk assessment was prepared using guidelines developed by OEHHA and CARB, as implemented in the latest version of the HARP model (Version 22118). The Air District risk assessment options in HARP were used for all analyses (Air District 2016).

Public Health Impact Study Methods

Emissions of TACs potentially associated with the facility were estimated using emission factors for PM₁₀ as DPM derived from the following:

- Caterpillar C175 Engines (20 sources):
 - Each large engine running for 50 hours per year for Maintenance and Readiness operations, at 100% load, using composite emissions factors to address both uncontrolled and controlled emissions during such testing.
- Caterpillar 3512C Engine (1 source):
 - Each small engine running for 50 hours per year for Maintenance and Readiness operations, at 100% load, using composite emissions factors to address both uncontrolled and controlled emissions during such testing.

TACs from fuel storage emissions were not included as the level of emissions are insignificant. The emissions from the diesel fuel storage tanks are often well below the HRA acute and chronic mass emissions triggers in Air District Regulation 2 Rule 5.

TACs from the indirect cooling systems (water cycle portion), based upon the water analysis data supplied by South Bay Water Reclamation were provided in the AQ Appendix Table AQ1-5. This table presents data on non-TACs as well. The 8 substances evaluated as TACs were arsenic, cadmium, total chromium, copper, lead, mercury, nickel and silica. The emissions of these substance for all systems combined were mostly insignificant (per the acute and chronic mass emissions trigger limits in Air District Regulation 2 Rule 5). However, they were included in the HRA analysis.

Concentrations of these pollutants in air potentially associated with the emissions were estimated using dispersion modeling as discussed in the Air Quality section. Modeling allows the estimation of both short-term and long-term average concentrations in air for use in a risk assessment, accounting for site-specific terrain and meteorological conditions. Health risks potentially associated with the estimated concentrations of pollutants in air were characterized in terms of excess lifetime cancer risks, or comparison with reference exposure levels for non-cancer health effects.

Health risks potentially associated with concentrations of carcinogenic pollutants in air were calculated as estimated excess lifetime cancer risks. The excess lifetime cancer risk for a pollutant is estimated as the product of the concentration in air and a unit risk value. The unit risk value is defined as the estimated probability of a person contracting cancer as a result of constant exposure to an ambient concentration of 1 $\mu\text{g}/\text{m}^3$ over a 30-year lifetime. In other words, it represents the increased cancer risk associated with continuous exposure to a concentration in air over a pre-defined period, i.e., usually a 30-year lifetime. Evaluation of potential non-cancer health effects from exposure to short-term and long-term concentrations in air was performed by comparing modeled concentrations in air with the RELs. An REL is a concentration in air at or below which no adverse health effects are anticipated. RELs are based on the most sensitive adverse effects reported in the medical and toxicological literature. Potential non-cancer effects were evaluated by calculating a ratio of the modeled concentration in air and the REL. This ratio is referred to as a hazard quotient. The unit risk values and RELs used to characterize health risks associated with modeled concentrations in air were obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* (CARB 01/2025) and are presented in Table 4.3-20.

Table 4.3-20: Toxicity Values Used to Characterize Health Risks

TAC	Unit Risk Factor ($\mu\text{g}/\text{m}^3$)-1	Chronic Reference Exposure Level ($\mu\text{g}/\text{m}^3$)	Acute Reference Exposure Level ($\mu\text{g}/\text{m}^3$)
DPM	0.0003	5	--
Source: CARB/OEHHA, 01/2025.			

Table 4.3-21 delineates the maximum hourly and annual emissions of the identified air toxic pollutants (DPM) from the emergency backup engines.

Table 4.3-21: Maximum NTBGF Hourly, Daily, and Annual Air Toxic Emissions

Engine Model	Toxic	Max Hour Emissions, Lbs	Max Daily Emissions, Lbs	Max Annual Emissions Lbs
CAT C175	DPM	0.193	-	9.65
CAR 3512C	DPM	0.106	-	5.30

Note: Engines are equipped with diesel particulate filters at ≤ 0.02 g/bhp-hour
Annual emissions are based on the Maintenance and Readiness Testing scenario.

Construction Phase Impacts

The proposed Project would be a source of air pollutant emissions during Project construction. The Air District CEQA Air Quality Guidelines considers exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard to be significant. Air District recommends a 1,000-foot zone of influence around project boundaries. Results of the construction related health risk assessment indicate that the risk values from construction would be as follows in Table 4.3-22:

Table 4.3-22: NTDC/NTBGF Construction Health Risk Assessment Summary

Location	Receptor #	UTM (meters)	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	2411	594610.0, 4137720.0	9.10E-07	0.000510	-	NA
MEIR	3679	593300.0, 4138250.0	4.28E-08	0.000024	-	NA
MEIS	3790	593400.0, 4138400.0	4.28E-08	0.000024	-	NA
MEIW	1644	594250.0, 4137860.0	3.29E-08	0.000182	-	NA

Note: PMI = point of maximum impact; MEIR = maximum exposed individual residential receptor; MEIW = maximum exposed individual worker receptor; MEIS = maximum exposed individual sensitive receptor

The PMI noted above is located at the northern fence line.

DPM is the surrogate compound for construction equipment diesel exhaust. No acute REL has been established for DPM.

38 month construction period (HRA used 4 years as a conservative exposure period.)

FAH=1 for all age groups from 3rd trimester to 16 years, for MEIR and MEIS.

FAH not used for MEIW.

MEIS – Montague Elementary School

These values are well below the Air District's significance thresholds for construction health risk impacts, and as such the community risk impacts from construction activities would be less than significant.

Characterization of Risks from Operations Toxic Air Pollutants

The excess lifetime cancer risk associated with operational concentrations in air estimated for the NTBGF PMI location is calculated to be 1.16E-05 or 11.6 per million which is located on the north-northwest project fence line. Excess lifetime cancer risks less than 10×10^{-6} , for sources with T-BACT, are unlikely to represent significant public health impacts that require additional controls of facility emissions. Risks higher than 1×10^{-6} may or may not be of concern, depending upon several factors. These include the conservatism of assumptions used in risk estimation, size of the potentially exposed population and toxicity of the risk-driving chemicals. Health effects risk thresholds are listed on Table 4.3-23. Risks associated with pollutants potentially emitted from the facility are presented Table 4.3-24 and Table 4.3-25. The chronic hazard indices for all scenarios are well below 1.0. It should be noted that DPM does not currently have an acute hazard index value, and as such, acute health effects were not evaluated in the HRA. Further description of the methodology used to calculate health risks associated with emissions to the air can be found in the HARP User's Manual dated 12/2003 and the ADMRT Manual dated 3/2015 (CARB 2015). As described previously, human health risks associated with emissions from the proposed facility are unlikely to be higher at any other location than at the location of the PMI. However, the location of the PMI is on the project fence line, adjacent to an existing parking lot and does not reflect the potential impact at any of the sensitive receptors, all of which have risks less than 10E-06 or 10 in a million. The rooftop cooling tower risk impacts were not added to the total risk as they were two orders of magnitude less and would not contribute to the overall risk.

Table 4.3-23: Health Risk Significance Thresholds

Risk Category	Air District Project Risk	Air District Net Project Risk
Cancer Risk	10×10^{-6}	10×10^{-6}
Cancer Risk (Overburdened Community)	6×10^{-6}	6×10^{-6}
Chronic Hazard Index	1.0	1.0
Acute Hazard Index	1.0	1.0
Cancer (T-BACT required)	>1 in a million Chronic HI > 0.20	>1 in a million Chronic HI > 0.20
Cancer Burden	NA	NA

Source: Regulation 2 Rule 5, NSR for Toxic Air Contaminants

Table 4.3-24: Operational NTDC/NTBGF Residential/Sensitive Health Risk Assessment Summary

Location	Receptor #	UTM (meters)	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	67	594394.54, 4137896.71	1.16E-05	0.00311	-	NA
MEIR	7491	596450, 4136000	5.42E-07	0.000146	-	NA
MEIS	3790	593400.0, 4138400.0	8.47E-07	0.000228	-	NA

Note: PMI = point of maximum impact; MEIR = maximum exposed individual residential receptor; MEIS = maximum exposed individual sensitive receptor

The PMI noted above is located at the northern fence line.

FAH=1 for all age groups from 3rd trimester to 16 years, for MEIR and MEIS.

FAH not used for MEIW.

MEIS – Montague Elementary School

The maximum 30-year cancer risk from rooftop chillers is 1.46E-09.

Table 4.3-25: Operational NTDC/NTBGF Worker Health Risk Assessment Summary

Location	Receptor #	UTM	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	67	594394.54, 4137896.71	3.38E-06	0.00311	-	NA
MEIW	1861	594350, 4137940	2.75E-06	0.00254	-	NA

Note: PMI = point of maximum impact; MEIW = maximum exposed individual worker receptor

The PMI noted above is located at the northern fence line.

The maximum worker risk from rooftop chillers is 2.76E-10.

Cancer risks potentially associated with facility emissions also were not assessed in terms of cancer burden. Cancer burden is a hypothetical upper-bound estimate of the additional number of cancer cases that could be associated with emissions from the facility. Cancer burden is calculated as the worst-case product of excess lifetime cancer risk, at the 1×10^{-6} isopleth and the number of individuals at that risk level. Cancer burden evaluations are not required by the Air District.

The chronic non-cancer hazard quotient associated with concentrations in air are shown in Table 4.3-24 and Table 4.3-25. The chronic non-cancer hazard quotient for all target organs falls below 1.0. As described previously, a hazard quotient less than 1.0 is unlikely to represent significant impact to public health. Since DPM does not have an acute REL, no acute hazard index or quotient was calculated. As described previously, human health risks associated with emissions from the proposed facility are unlikely to be higher at any other location than at the location of the PMI. If there is no significant impact associated with concentrations in air at the PMI location, it is unlikely that there would be significant impacts in any other location in the vicinity of the facility.

The estimates of excess lifetime cancer risks and non-cancer risks associated with chronic or acute exposures fall below thresholds used for regulating emissions of toxic pollutants to the air. Historically, exposure to any level of a carcinogen has been considered to have a finite risk of inducing cancer. In other words, there is no threshold for carcinogenicity. Since risks at low levels of exposure cannot be quantified directly by either animal or epidemiological studies, mathematical models have estimated such risks by extrapolation from high to low doses. This modeling procedure is designed to provide a highly conservative estimate of cancer risks based on the most sensitive species of laboratory animal for extrapolation to humans (i.e., the assumption being that humans are as sensitive as the most sensitive animal species). Therefore, the true risk is not likely to be higher than risks estimated using unit risk factors and is most likely lower, and could even be zero (EPA, 1986; EPA, 1996).

An excess lifetime cancer risk of 1×10^{-6} is typically used as a screening threshold of significance for potential exposure to carcinogenic substances in air. The excess cancer risk level of 1×10^{-6} , which has historically been judged to be an acceptable risk, originates from efforts by the Food and Drug Administration (FDA) to use quantitative risk assessment for regulating carcinogens in food additives in light of the zero-tolerance provision of the Delany Amendment (Hutt, 1985). The associated dose, known as a “virtually safe dose” (VSD) has become a standard used by many policy makers and the lay public for evaluating cancer risks. However, a study of regulatory actions pertaining to carcinogens found that an acceptable risk level can often be determined on a case-by-case basis. This analysis of 132 regulatory decisions, found that regulatory action was not taken to control estimated risks below 1×10^{-6} (one-in-one million), which are called de minimis risks. De minimis risks are historically considered risks of no regulatory concern. Chemical exposures with risks above 4×10^{-3} (four-in-ten thousand), called de manifestis risks, were consistently regulated. De manifestis risks are typically risks of regulatory concern. The risks falling between these two extremes were regulated in some cases, but not in others (Travis et al, 1987).

The estimated lifetime cancer risks to the maximally exposed individual located at the NTBGF PMI, MEIR, MEIW, and MEIS do not exceed the 10×10^{-6} significance level for T-BACT sources. These engines are EPA Tier 4 units equipped with diesel particulate filters, and are used only for emergency power backup, therefore BACT or T-BACT for DPM is satisfied. The chronic hazard index value is also well below the significance threshold of 1.0. These risk estimates were calculated using assumptions that are highly health conservative. Evaluation of the risks associated with the NTBGF emissions should consider that the conservatism in the assumptions and methods used in risk estimation considerably over-state the risks from NTBGF emissions. Based on the results of this risk assessment, there are no significant public health impacts anticipated from emissions of toxic pollutants to the air from the NTBGF.

Operation Odors

The facility is not expected to produce any contaminants at concentrations that could produce objectionable odors.

Summary of Impacts

The health risk assessment for the NTBGF indicates that the maximum cancer risk will be approximately 5.42×10^{-7} (versus a significance threshold of 10×10^{-6} with T-BACT) at the MEIR to air toxics from NTBGF emissions. This risk level is considered to be not significant. Non-cancer chronic effects for all scenarios are well below the chronic hazard index significance value.

Results from an air toxics risk assessment based on emissions modeling indicate that there will be no significant incremental public health risks from the construction and operation of the NTBGF. Results from criteria pollutant modeling for routine operations indicate that potential ambient concentrations of NO₂, CO, SO₂, and PM₁₀ will not significantly impact air quality. Potential concentrations are below the federal and California standards established to protect public health, including the more sensitive members of the population.

Construction and Operation Overlap Assessment

The following analysis addresses the emissions overlap period in which the engines from phase DC North will be readiness and maintenance tested during the construction of DC2. The overlap data is summarized as follows:

- The overlap period, based upon the current construction schedule, will commence near the end of construction of DC North (start of construction of DC West). The overlap period will be approximately 19.5 months (1.625 years).
- DC North consists of 20 large engines (CAT C175) and 1 small engine (CAT 3512C).
- All of the large engines and the single small engine will be readiness and maintenance tested during the 19.5-month period.
- Annual emissions (readiness/maintenance testing only) for the engines are based on 50 hours/year each over the scheduled 1.625-year period.
- Emissions from construction of DC2 were derived from CalEEMod and adjusted based on Appendix E, SubAppendix AQ4 Table AQ4-3. These emissions were annualized for any representative 12-month period during the 19.5 month overlap period.

Table 4.3-26 below shows the emissions summary for the overlap period (annualized).

Table 4.3-26: Overlap Emissions Table

Parameter	NO _x	CO	VOC	SO _x	PM ₁₀ Exhaust/Fugitive	PM _{2.5} Exhaust/Fugitive
Total DC North Engine Emissions, tpy	5.8	12.9	0.70	0.021	0.103	0.103
DC North Cooling Tower, tpy	-	-	-	-	0.136	0.136
DC West Annualized Construction Emissions (tpy)	0.959	3.652	1.208	0.007	0.009/0.37	0.009/0.098

Notes: See Table AQ4-3 for the emissions breakout analysis for DC2. Engines will be Maintenance and Readiness tested for no more than 50 hours/year. Engines will not be tested concurrently. Construction will occur 5 days/week for an average of 8 hours/day.

Daily and hourly emissions for the backup generator engines were derived from the emissions calculations presented in Appendix E, SubAppendix AQ1, while daily and hourly emissions from construction were derived from the annualized construction emissions presented in Table 4.3-25 above. Table 4.3-26 presents the daily and hourly emissions for the overlap period.

Table 4.3-27: Daily and Hourly Emissions for the Overlap Period (Maintenance and Readiness Testing)

Parameter	NO _x	CO	VOC	SO _x	PM ₁₀ Exhaust/Fugitive	PM _{2.5} Exhaust/Fugitive
8 Large Engines, pounds/day	90.15	200.69	10.81	0.386	1.544	1.544
DC North Cooling Tower, pounds/day	-	-	-	-	0.743	0.743
DC West Annualized Construction Year Emissions (pounds/day)	7.26	27.66	9.15	0.06	0.07/2.80	0.07/0.74
Total Estimated Emissions, pounds/day (w/o cooling tower)	97.4	228.4	20.0	0.45	1.61/2.80	1.61/0.74
1 Large Engine, pounds/hour	11.27	25.08	1.351	0.048	0.193	0.193
DC North Cooling Tower, pounds/hour	-	-	-	-	0.031	0.031
DC West Annualized Construction Year Emissions (pounds/hour)	0.91	3.46	1.14	0.007	0.009/0.349	0.009/0.093
Total Estimated Emissions, pounds/hour (w/o cooling tower)	12.18	28.54	2.50	0.055	0.202/0.349	0.202/0.093

Notes:

1. See Table AQ4-3 for the emissions breakout analysis for DC2
2. Max hourly engine emissions are based on 1 large engine (readiness/maintenance testing) for 1 hour/day.
3. Max daily engine emissions are based on 8 large engines tested for 1 hour each per day.
4. Construction for 12 months at 22 days/month = 264 days. 8 hours/day.

Criteria Pollutant Impacts for Overlap Scenario

The same background ambient air quality levels and modeling techniques from the modeling analyses of Project operating impacts were used in the construction analysis. The applicable background concentrations of NO₂, SO₂, CO, PM_{2.5}, and PM₁₀ from the operational modeling analyses used in the construction impact analysis are shown in the following table. As with the previous modeling assessment, the EPA-approved model AERMOD was used to estimate ambient impacts from construction activities, consistent with the facility operational impact analyses and the AERMET meteorological preprocessor was used by Air District to process the meteorological data from the San Jose (surface data) and Oakland Airport (upper air data).

The emission sources for the construction site were grouped into two categories: exhaust emissions and dust emissions. Combustion equipment exhaust emissions for the overlap analysis were modeled as 173-3.048-meter-high point sources (exhaust parameters of 750 Kelvins, 64.681 m/s exit velocity, and 0.1524-meter stack diameter) placed at regular 20-meter intervals around the construction area of the Project. Construction fugitive dust emissions were modeled as an area source covering the construction area with an effective plume height of two (2) meters (6.6 feet). Combustion and fugitive emissions were assumed to occur for 10 hours/day (7 AM to 5 PM) consistent with the expected period of onsite construction activities generating both exhaust emissions and fugitive dust. The construction impacts modeling analysis used the same receptor locations and meteorological data as used for the Project operating impact analysis. Figure AQ4-2 presents the point source and area source locations as well as the locations of the emergency diesel generators next to the DC North data center. The receptor locations and meteorological data used in this analysis were previously discussed.

Modeling Results

Based on the emission rates of the routine testing of the engines at DC North plus the construction emissions for DC2 of NO_x, SO₂, CO, PM_{2.5}, and PM₁₀, the modeling options, receptor grids, and meteorological data, AERMOD calculated the short-term and annual ambient impacts for each pollutant. As mentioned above, the modeled 1-hour, 3-hour 8-hour, and 24-hour ambient impacts are based on the worst-case daily emission rates of NO_x, SO₂, CO, PM_{2.5}, and PM₁₀ spread over the estimated daily hours of operation. The annual impacts are based on the annual emission rates of these pollutants. The 1-hour and annual average concentrations of NO₂ were computed using ARM2 method with a NO₂/NO_x ratio of 0.5. Background concentrations were added to the modeled results.

The modeling analysis results are shown in Table 4.3-28 below, including the appropriate background levels and the resulting total ambient impacts. Modeled crossover impacts are expected to be below the most stringent state and Federal standards for all pollutants except PM₁₀ and PM_{2.5}, where the background already exceeds the standards.

For this overlap modeling, with the exception of the fugitive dust from the area source of activity, the emergency generators and cooling towers are less than the applicable annual PM_{2.5} SIL. While the fugitive dust (PM_{2.5}) remains over the SIL, construction activities are temporary in nature. And as noted in the Air District CEQA Guidelines, application of the fugitive dust control measures would reduce PM fugitive impacts to less than significant. Thus, the overlap modeling demonstrates that the Project will not cause or contribute to exceedances of the annual PM_{2.5} CAAQS or NAAQS.

Table 4.3-28: Modeled Overlap (Construction + Operation) Concentrations and Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Concentration (µg/m³)	Background (µg/m³)	Total (µg/m³)	Ambient Air Quality Standards (µg/m³)	
					CAAQS	NAAQS
Construction occurs for up to 10 hours/day (7AM-5PM)						
NO ₂ *	1-hour maximum (CAAQS)	121.03	111	232.03	339	-
	3-year average of 1-hour yearly 98th % (NAAQS)	2.76	80	82.76	-	188
	Annual maximum	1.7	17.8	19.5	57	100
CO	1-hour maximum	419.66	2175	2594.66	23,000	40,000
	8-hour maximum	300.84	1718	2018.84	10,000	10,000
SO ₂	1-hour maximum (CAAQS)	0.81	93.4	94.21	655	-
	3-year average of 1-hour yearly 99th % (NAAQS)	0.02	5.2	5.22	-	196
	24-hour maximum	0.19	5	5.19	105	365
	Annual maximum	0.01	0.6	0.61	-	80
PM ₁₀	24-hour maximum (CAAQS)	1.8	134	135.8	50	-
	24-hour H6H (NAAQS)	1.6	41	42.6	-	150
	Annual maximum (CAAQS)	0.8	24.8	25.6	20	-
PM _{2.5}	3-year average of 24-hour yearly 98th %	0.54	25.7	26.24	-	35
	Annual maximum (CAAQS)	0.22	10.1	10.32	12	-
	3-year average of annual concentrations (NAAQS)	0.20	9.1	9.30	-	9.0
*1-hour NO ₂ impacts evaluated with Ambien Ratio Method #2 (ARM2), with the maximum hourly background added in separately. Annual NO ₂ impacts evaluated with ARM2. Modeling utilized EPA-default minimum/maximum NO ₂ /NO _x ambient ratios of 0.5/0.9.						
1 - Maximum 8th-highest max daily 1-hr results averaged over 5 years						

-
- 2 - Maximum 4th-highest
 - 3 - Maximum 8th-highest 24-hr results averaged over 5 years
 - 4 - Maximum annual results averaged over 5 years
-

HRA Impacts for Overlap Scenario

An HRA was performed using the HARP Risk Assessment Standalone Tool (Version 22118). The HRA was performed for DPM only, as DPM is the accepted surrogate compound for whole diesel exhaust. The necessary output files from AERMOD were imported into HARP. Detailed descriptions of the risk assessment methods and support data are contained in the SPPE application document and are not repeated here. Assumptions used in the HRA analysis are as follows:

- The standard project receptor file was used. This file contained an extensive cartesian grid of receptors as well as the identified sensitive receptors included in the other project modeling analyses.
- The Air District health tables were used (enabled in HARP)
- Two separate analyses were run as follows:
 - a. Residential run, FAH=1, 2-year exposure period (see note below)
 - b. Worker run, FAH=off, 2-year exposure period (see note below)Note: HARP does not allow fractions of years as exposure values, therefore a 2-year exposure period was used to represent the 18-month emissions overlap.
- The PMI, MEIR, MEIW, and MEIS values were derived from the HRA output files.

Results of the HRA overlap scenario are shown in Table 4.3-29.

Table 4.3-29: NTBGF Overlap (Construction + Operation) Health Risk Assessment Summary

Location	Receptor #	UTM (meters)	Cancer Risk	Chronic HI	Acute HI	Cancer Burden
PMI	67	594394.54, 4137896.71	5.15E-06	0.00354	-	NA
MEIR	4008	593600.0, 4138500.0	1.95E-07	0.000134	-	NA
MEIS	3845	593450.0, 4138450.0	1.80E-07	0.000124	-	NA
MEIW	1819	594330.0, 4137940.0	1.49E-07	0.00164	-	NA

Notes: Note: PMI = point of maximum impact; MEIR = maximum exposed individual residential receptor; MEIW = maximum exposed individual worker receptor; MEIS = maximum exposed individual sensitive receptor

The PMI noted above is located on the southeast fenceline.

Testing hours for the overlap of construction and operation was set to 50 hours per engine/year.

DPM is the surrogate compound for construction equipment diesel exhaust. No acute REL has been established for DPM.

DC2 construction period is 19.5 months (HRA used 2-year exposure period.)

FAH=1 for all age groups from 3rd trimester to 16 years, for MEIR and MEIS.

FAH not used for MEIW.

*MEIS – Montague Elementary School

CalEnviroScreen 4.0 Survey

Pursuant to recent amendments to Air District Regulation 2 Rules 1 and 5 which address a lower risk threshold value for sources located in or within 1,000 feet of an Overburdened Community (OBC) (an area with a percentile rating of greater than or equal to 70th percentile, the maximum allowed risk from such facilities is 6×10^{-6} in place of 10×10^{-6}). There is no change to the cumulative risk value threshold of 100-in-a-million. A review of the CalEnviroScreen maps (2/5/2025) indicates the following:

- The Project Site is situated in zone 6085505007, rated at the 39th percentile.
- The Project Site is surrounded by zones 6085505202, 6065505100, and 6085505006, all which are rated at less than the 70th percentile.
- The total population for the four (4) zones noted above is currently estimated to be approximately 26,692 individuals.
- The Project Site is situated approximately 1.7 miles from zone 6085504318 which is rated at the 80th percentile.

Based on the above, the Project would not be subject to the lower risk threshold applicable to an OBC per Regulation 2 Rules 1 and 5 (i.e., the distance from the Project Site to a known OBC is greater than 1,000 feet).

4.3.3.4 Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a significant cumulative air quality impact?

The geographic area for cumulative air quality impacts is the SFBAAB. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact.

In developing thresholds of significance for air pollution, the Air District considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's air quality conditions.

Implementation of the 2017 CAP

As described above under checklist question a), the Project would be consistent with the 2017 CAP. The Project, therefore, would not result in a cumulatively considerable impact to the implementation of the 2017 CAP.

Increase in Criteria Pollutants

As discussed under checklist question a) and b), the construction and operational emissions generated by the Project would not exceed the Air District's thresholds for criteria air pollutant emissions. Therefore, the Project would not result in a cumulatively considerable contribution to criteria pollutant emissions.

Exposure Sensitive Receptors to Substantial Pollutant Concentrations

Air District's Role in Air Quality

The Air District is the primary agency responsible for assuring that the National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively) are attained and maintained in the Bay Area. Air District's jurisdiction includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara counties, and the southern portions of Solano and Sonoma counties. The Air District's responsibilities in improving air quality in the region include: preparing plans for attaining and maintaining air quality standards; adopting and enforcing rules and regulations; issuing permits for stationary sources of air pollutants; inspecting stationary sources and responding to citizen complaints; monitoring air quality and meteorological conditions; awarding grants to reduce mobile emissions; implementing public outreach campaigns; and assisting local governments in addressing climate change.

Under the Small Power Plant Exemption process with the Commission, the Air District acts as a Responsible Agency when it has limited discretionary authority over a portion of a project but does not have the primary discretionary authority of a Lead Agency. As a Responsible Agency, the Air District may coordinate the environmental review process with the lead agency regarding the Air District's permitting process, provide comments to the Lead Agency regarding potential impacts, and recommend mitigation measures.

Cumulative Thresholds of Significance

In accordance with Air District CEQA Guidelines, a project impact would be considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

In May 2017, the Air District updated the significance thresholds for agencies to use with environmental review of projects. These thresholds were designed to establish the level at which Air District believed air pollutant emissions would cause significant impacts under CEQA.

A project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source plus the contribution from the project exceeds the following recommended significance thresholds in Table 4.3-30 below.

Table 4.3-30: Cumulative Significance Thresholds

Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources within 1,000-Foot Zone of Influence) and Cumulative Thresholds for New Sources

Excess Cancer Risk 100 per 1 million

Chronic Hazard Index 10.0

Annual Average PM_{2.5} 0.8 µg/m³

Notes: µg/m³ = micrograms per cubic meter; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Thresholds are applicable to construction and operational activities.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

Cumulative Impacts Assessment

Stationary and mobile cumulative source impacts were not assessed for the proposed Project as the nearest sensitive receptor is 3,200 feet from the Project fence line, well in excess of the 1,000 foot radius established by the Air District for cumulative assessments. However, for summary purposes, cumulative risks from permitted stationary sources of TACs near the Project Site were identified using Air District's Stationary Source Risk and Hazard Analysis Tool. This mapping tool uses Google Earth to identify the location of stationary sources and their estimated screening level cancer risk and hazard impacts. This tool identified thirteen (13) sources within 1,000 feet of the Project boundaries and the distance adjusted impacts are summarized in Table 4.3-31. The Air District Health Risk Calculator was utilized to adjust the Air District provided risk, hazard and PM_{2.5} concentrations based on distance.

Table 4.3-31: Combined Source Listing (Post-Air District Distance Adjustments)

Source	Maximum Cancer Risk (per million)	Hazard Index	PM_{2.5} concentration (µg/m³)
17437 Lumileds LLC	15.3015	2.861	0.85487
18923 City of San Jose MWTP	0.1333	0	0
15271 Accurate Finishing	0	0	0
8611 Gilbert Spray Coat	0	0	0.00647
19141 SJC Fuel Company LLC	0.8172	0	0.0009
104171-1 ConocoPhillips	0.4119	0.0018	0
22513 Verizon Business	0.7595	0	0
201160 AutoMax Collision Inc	0	0	0
201418 Toshiba	0.544	0	0.0008
22797 Caliber Collision Center	0	0	0
201834 Harmonic Inc.	2.5265	0	0.0031
23091 Apple Inc.	0.1215	0	0
202171 TBUSA	5.5022	0.0022	0.0066
NTBGF	0.542	0.00015	0.04
Microsoft SJC04/06	0.233	0.00014	0.115
<i>Combined Sources¹</i>	26.89	2.86	1.03
Air District Threshold – Combined Sources	100	10.0	0.8

Based on actual distances to the sensitive receptors, the summarized impacts would be much smaller than the listed results.

Note: ¹The combined source level is an overestimate because the maximum impact from each source is assumed to occur at the same location.

The cumulative cancer and hazard index impacts are all less than the Air District CEQA thresholds. For PM_{2.5}, one facility, Lumileds LLC, is exceeding the cumulative concentration threshold by itself. All PM_{2.5} concentrations for the NTBGF at all sensitive receptors are well below the Air District annual significance criteria of 0.3 ug/m³ and below the NAAQS significance level of 0.13 ug/m³. Thus, regardless of the background cumulative PM_{2.5} impacts, the Projects contributions will always be less than the Air District CEQA significance levels and represent an insignificant impact.

4.4 Biological Resources

The following discussion is based upon an Arborist Report prepared by HMM dated May 12, 2025 and a Biological Resources Evaluation prepared by H. T. Harvey & Associates, Inc. dated June 2025. Copies of these reports are included as Appendix F and Appendix G of this SPPE Application, respectively. The Biological Resources Report recommends certain mitigation measures that the Applicant has incorporated as PDMs herein.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Envision San José 2040 General Plan

The following General Plan policies related to biological resources are applicable to proposed projects in San José:

Policy	Description
ER-5.1	Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.
ER-5.2	Require that development projects incorporate measures to avoid impacts to nesting migratory birds.
MS-21.4	Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.
MS-21.5	As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction

Policy	Description
	practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.
MS-21.6	As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.
CD-1.24	Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible include replacement or alternative mitigation measures in the project to maintain and enhance our Community Forest.

San José Tree Ordinance

The City of San José maintains the urban landscape by controlling the removal of ordinance trees on private property (San José Municipal Code Section 13.32). Per the City’s Municipal Code, ordinance-size trees are defined as follows: Single Trunk - 38 inches or more in circumference at 4.5 feet above ground, or Multi-trunk - The combined measurements of each trunk circumference, at 4.5 feet above ground, add up to 38 inches or more in circumference. Ordinance trees are generally mature trees that help beautify the City, slow the erosion of topsoil, minimize flood hazards, minimize the risk of landslides, increase property values, and improve local air quality. A tree removal permit is required from the City of San José for the removal of ordinance trees.

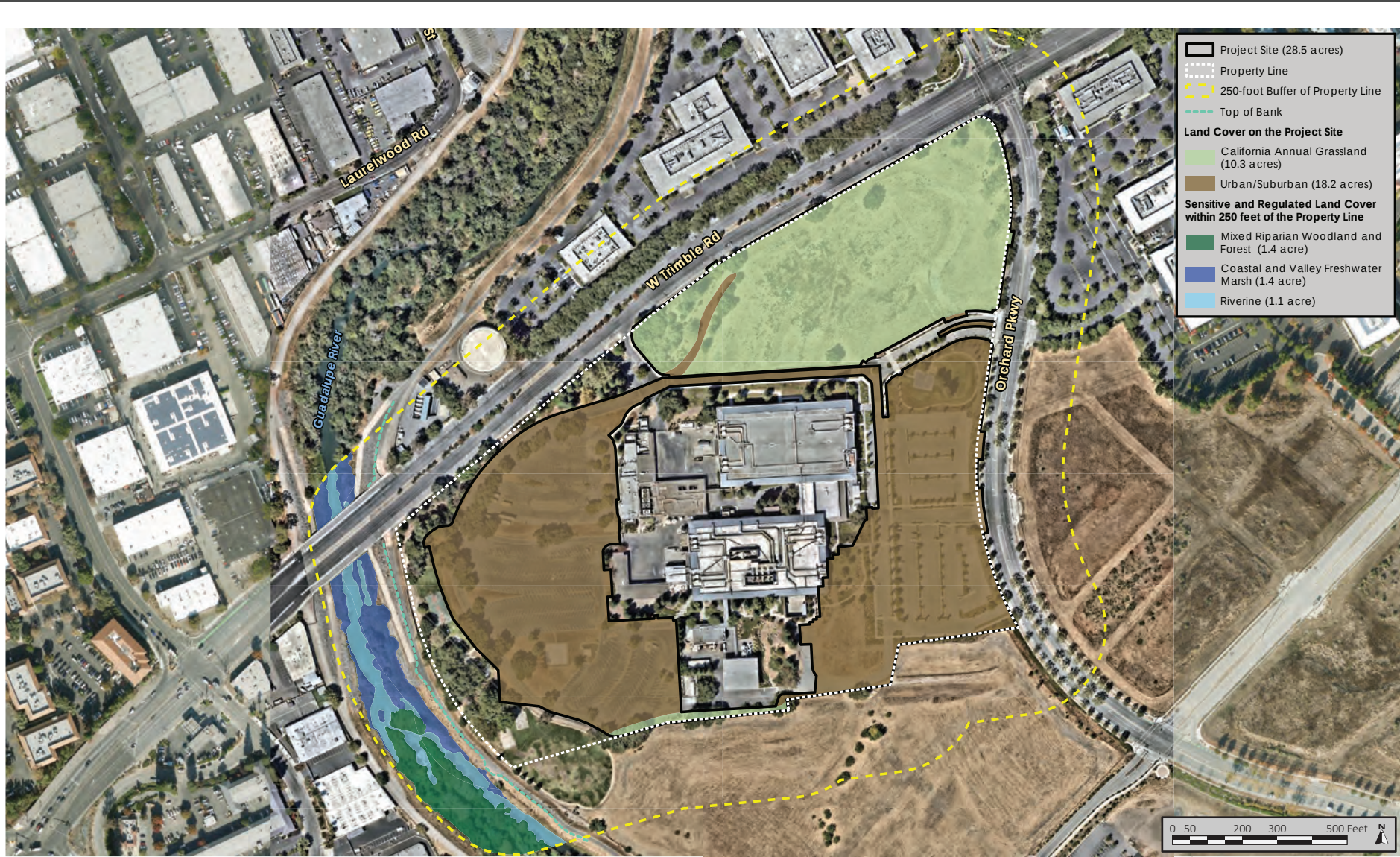
4.4.1.2 *Existing Conditions*

Project Site

The Project Site consists of surface parking lots and a graded, undeveloped parcel with grasses and trees. The Intersection Improvement Area is located within paved areas of West Trimble Road and Orchard Parkway and is not discussed further in this section because it provides no biological value. The Biological Resources Report prepared for the Project by H. T. Harvey & Associates was based on site reconnaissance surveys conducted in February 2025 and April 2025 only to survey for Crotch’s bumble bee.

Santa Clara Valley Habitat Plan Land Covers

The Habitat Plan land covers identified within the Project Site include the following: 10.3-acres of California Annual Grassland and 18.2-acres of Urban-Suburban (i.e., developed/landscaped), as described below. A land cover map is shown in Figure 4-1.



Source: H.T. Harvey & Associates, June 2025.

BIOLOGICAL RESOURCES LAND COVER MAP

FIGURE 4-1

California annual grassland is primarily located in the northern portion of the site near the intersection of West Trimble Road and Orchard Parkway where the DC North building would be constructed. This area was previously a paved parking lot but was cleared and graded in 2022 for a construction project that did not move forward. Currently, this area includes mature, planted coast live oaks, coast redwoods, and other trees. An additional small area of grassland is present in the southern portion of the site, adjacent to the existing parking area on the western end of the Project Site. This grassland is located on the periphery of a larger grassland that has been regularly mown and maintained for decades. Barrels labelled as containing hazardous materials were present in this area during the February 2025 site visit. A line of coast live oaks grows adjacent to the southern grassland along the parking lot. All grasslands on the site are dominated by nonnative grasses such as wild oats and ripgut brome, as well as weedy forbs such as wild radish, short-podded mustard, black mustard, goose grass, and dissected geranium.

The wildlife that exists on the Project Site is limited due to human disturbance, including mowing, and the isolation of this habitat from other grassland in the region. The following species occur on the grassland area of the Project Site and use the site for foraging: house finch, bushtit, lesser goldfinch, cliff swallow, and Mexican free-tailed bat. Other species that could occur on the grassland habitat for foraging are the Botta's pocket gopher, California vole, deer mouse, red-tailed hawks, red-shouldered hawks, barn owls, western fence lizard, gopher snake, southern alligator lizard native striped skunk, raccoon, black-tailed jackrabbit, nonnative Virginia opossum, feral cat.

Urban-Suburban

Urban-Suburban land, as described in the Habitat Plan, is comprised of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as areas with one or more structures per 2.5 acres. Vegetation found in Urban-Suburban land is usually in the form of landscaping, planted street trees, and parklands. There is no land cover fee for lands with this designation. Urban-Suburban areas on the Project Site include paved pedestrian paths, parking lots, associated landscape vegetation, and a gravel access road. Landscaped vegetation within these areas consists of predominantly nonnative ornamental trees, shrubs, and groundcovers including turf, hairy crab grass, London plane tree, English elm, crape myrtle, and cotoneaster. A number of native trees, including coast live oak trees, are also present.

Any wildlife that occurs within the Urban-Suburban land would be very limited and tolerate frequent human disturbance. Species that could use the site include the following: nonnative European starling, rock pigeon, house mouse, Norway rat, native raccoon, striped skunk, Western fence lizards, American crow, northern mockingbird, California scrub-jay, Anna's hummingbird, California towhee, bushtit, and dark-eyed junco. Large trees adjacent to the project site provide potential nesting sites for raptors, such as red-shouldered hawks and Cooper's hawks (*Accipiter cooperii*), although no old, existing raptor nests were observed within or adjacent to the Project Site during H.T. Harvey's site visit.

Adjacent Habitat Areas

The Project Site is located adjacent to the Guadalupe River, which supports mixed riparian woodland and forest, riverine, and coastal and valley freshwater marsh habitats just outside the western boundary of the project site.

The banks of the Guadalupe River are characterized by mixed riparian woodland and forest habitat with a dense canopy of native and nonnative mature trees. Riparian trees present are native red willow, arroyo willow, Fremont cottonwood, and nonnative London plane. The majority of the tree cover is composed of cottonwoods and willows, with minor canopy branch die back, including a few standing snags of dead individual trees. Further in the channel bed of the Guadalupe River are coastal and valley freshwater marshes with herbaceous wetland vegetation that is maintained by the riverine habitat within the Guadalupe River. The moderately high-quality, diverse vegetation within the Guadalupe River area supports a number of local birds. However, human disturbance, narrow width of riparian canopy, urban development, and presence of feral cats that prey upon the native birds affect the overall quality of the riparian habitat for birds.

In addition to birds, other wildlife that is present in the riparian habitat along Guadalupe River include the gopher snake, western fence lizard, southern alligator lizard, arboreal salamander, native Pacific tree frog, native raccoon, striped skunk, nonnative Virginia opossum, Norway rat, black rat, feral cat, and eastern gray squirrel.

Wildlife Movement

Movement corridors are segments of habitat that provide linkage for wildlife through the mosaic of suitable and unsuitable habitat types found within a landscape while also providing cover. On a broader level, corridors also function as paths along which wide-ranging animals can travel, populations can move in response to environmental changes and natural disasters, and genetic interchange can occur. In California, environmental corridors often consist of riparian areas along streams, rivers, or other natural features. There are currently no well-defined movement corridors for mammals or reptiles within or through the project site due the density of development in the Project region and lack of continuous vegetated pathways.

The Project Site does not serve as a wildlife corridor. Some species, such as birds, that are migratory may move through the project site during specific seasons, but there are no other mammal species in the vicinity of the site that are truly migratory. Most dispersal by wildlife species in the region likely occurs along higher-quality habitats, such as the Guadalupe River corridor to the southwest, and along the edge of the San Francisco Bay to the north.

The Guadalupe River, which eventually drains to the open waters of the San Francisco Bay, and its associated riparian corridor adjacent to the site serves as a movement corridor for several common and special-status species of birds, fish, mammals, reptiles, and amphibians in the project vicinity, as it provides sufficient vegetative cover preferred by these species when navigating across the

landscape. Specifically, migratory birds, rabbits, striped skunks, raccoons, Pacific treefrogs, and alligator lizards, amongst other species, are expected to move along this corridor adjacent to the Project Site.

Overall, the Project Site is not a particularly important area for movement by non-flying wildlife, and it does not contain any high-quality corridors allowing dispersal of such animals through the City. However, the Guadalupe River located immediately east of the site provides a corridor for wildlife species to disperse north and south through San José.

Special-Status Species

Under CEQA, special-status species are considered to be those that are protected by state, federal, or local governments as “threatened, rare, or endangered”, as described in further detail below.

Special-status plants are considered plant species that are:

- Listed under Federal Endangered Species Act (FESA) as threatened, endangered, proposed threatened, proposed endangered, or a candidate species;
- Listed under the California Endangered Species Act (CESA) as threatened, endangered, rare, or a candidate species;
- Listed by the California Native Plant Society (CNPS) as California Rare Plant Rank (CRPR) 1A, 1B, 2, 3, or 4.

Special-status animals are considered animal species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species;
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species;
- Designated by the CDFW as a California species of special concern;
- Listed in the California Fish and Game Code as fully protected species.

Special-Status Plants

Based on a review of the CNPS and California Natural Diversity Database (CNDDDB), there is only one special-status plant species present in the Project vicinity - Congdon’s tarplant. Congdon’s tarplant is an annual herb in the composite family (Asteraceae) that is endemic to California. It has a variable blooming period extending from approximately May through November. Congdon’s tarplant occurs in valley and foothill grassland habitat, floodplains, and swales, particularly those with alkaline substrates; and in disturbed areas with nonnative grasses.

Four occurrences of Congdon's tarplant are recorded on CNDDDB within five miles of the project site: Occurrences #17, #18, #40, and #41. The closest record to the project site is Occurrence #41, which is a population located adjacent to a wastewater facility in Alviso. The remaining three occurrences are located more than three miles north, northwest, and southwest of the of the Project Site. Record #18 occurs at the Sunnyvale Baylands Park in relatively high-quality grassland habitat, record #17 occurs in highly disturbed, ruderal grassland habitat, similar to that observed on the project site, and record #40 is a historic population that is considered to be extinct due to development in eastern San José. The survey performed in February 2025 was too early in the year to detect Congdon's tarplant. Thus, the possibility that the species may be present on the site cannot be ruled out.

Special-Status Animals

A review of the Project Site noted that a number of special-status species would be absent from the site because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Species such as the tricolored blackbird, Bryant's savannah sparrow, grasshopper sparrow, golden eagle, and pallid bat could occur on the Project Site as nonbreeding migrants, transients, or foragers.

The only potential wildlife species that could occur on-site include Crotch's bumble bee, monarch butterfly, burrowing owl, northwestern pond turtle, and white-tailed kite. These species can potentially breed or occur on or immediately adjacent to the project site and/or may be significantly impacted by project construction. A brief description and observations about each aforementioned special-status animal is summarized below.

- **Crotch's Bumble Bee:** The Crotch's bumble bee is a State Candidate for listing under the CESA since 2019. This species' habitat is primarily open grassland and scrub habitats. No individuals were observed on the site during a focused survey conducted in April 2025, and the project site does not provide high-quality habitat for this species, as few flowering plants are present and the grasslands are regularly maintained by mowing. Due to the low quality of the habitat present as well as the lack of ground squirrel burrows, nesting on the site is not expected under current conditions. However, individuals may occur occasionally and in small numbers as foragers. In addition, should California ground squirrels colonize the site in the future (e.g., by moving onto the site from adjacent properties), burrows would provide suitable nesting sites for this species, and nesting could potentially occur.
- **Monarch Butterfly:** The monarch butterfly is a federal candidate for listing on the FESA. This species' habitat requires milkweeds for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats. Individuals congregate in winter roosts, primarily in Mexico and in widely scattered locations on the central and southern California coast. The monarch butterfly may be present on-site as a breeder. No larval host plants were observed on the project site during the February 2025 survey; however, milkweeds, if present, would not have been detectable at that time of year. If

milkweeds are present on the site, monarch butterflies may breed on the project site from March through October. However, due to the limited size of the site, only small numbers of monarch butterflies are expected to breed there, if any. Small numbers of individuals may forage throughout the project site, especially during spring and fall migration. However, the site does not provide high-quality foraging habitat for this species. No suitably dense groves of trees are present on the project site to provide suitable overwintering habitat for monarchs, and no current or historical overwintering sites are known as far inland as the project site; the nearest known overwintering location is approximately 3.9 miles to the northwest at Sunnyvale Baylands Park.

- **Burrowing Owl:** The burrowing owl is a Habitat Plan Covered Species, California Species of Special Concern, and a State Candidate for listing under the CESA. The species habitat is open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels. There are no records of burrowing owls on the Project Site and no burrowing owls were observed during H. T. Harvey & Associates' site visit. However, burrowing owls have been known to occur on the undeveloped properties adjacent to the site. The closest known record of a burrowing owl to the project site was less than 200 feet to the east, where owls were previously known to nest and occur year-round. The most recent record of a pair of nesting burrowing owls near the project site was detected by H. T. Harvey & Associates staff at the Pacific Gas & Electric substation on Component Drive approximately 1,415 feet to the northeast on June 2, 2015. Due to the distance between the site and the nearest owl nesting locations, the site is not currently considered to provide foraging habitat for any known breeding pairs of this species. Thus, if burrowing owls occur on the site at all under current conditions, they are expected to occur as occasional foraging migrants or dispersants, rather than breeders, and they are not expected to occur regularly. However, should California ground squirrels colonize the site in the future (e.g., by moving onto the site from adjacent properties), burrows would provide suitable nesting and roosting sites for this species, and nesting or roosting individuals could potentially occur.
- **Northwestern Pond Turtle:** The northwestern pond turtle is Habitat Plan Covered Species, California Species of Special Concern, and Federally Proposed as Threatened on the FESA. This species' habitat includes permanent or nearly permanent water in a variety of habitat. While there is no suitable aquatic habitat on-site and no turtles were observed during the February 2025 site visit, individuals of northwestern pond turtle are present in the Guadalupe River adjacent to the Project Site. Potentially suitable nesting habitat for northwestern pond turtles is present in grassland areas on the project site. Although a chain-link fence surrounding the site prevents access by this species along most of the site adjacent to the river, an approximately 10-inch square gap is present that would allow access. Thus, it is possible that an individual could occasionally access the project site, although the likelihood is very low due to the very specific route it would need to navigate through the gap in the fence.
- **White-Tailed Kite:** The white-tailed kite is a State fully protected species on the CESA. This species' habitat is tall shrubs and trees and it forages in grasslands, marshes, and ruderal habitats. No white-tailed kite were observed by H. T. Harvey during the February site visit.

However, potentially suitable nesting habitat for this species is present in trees on and adjacent to the project site, and suitable foraging habitat is present in grasslands on the project site. Up to one pair of white-tailed kites may nest on or adjacent to the site, and occasional individuals may forage on the site year-round.

Sensitive Natural Communities and Habitats

Two sensitive natural communities were identified in the CNDDDB as occurring within the vicinity the Project Site: 1) sycamore alluvial woodland and 2) northern coastal salt marsh. No riparian habitat occurs within the Project Site boundary. The neighboring mixed riparian woodland and forest habitat occurring along the Guadalupe River adjacent to the Project Site does not meet the definition of sycamore alluvial woodland, which is dominated by western sycamore trees, and occurs within braided, depositional channels of intermittent streams, usually with cobble or boulder substrate. No marsh habitat was mapped during the site reconnaissance; therefore, no northern coastal salt marsh was determined to occur within the Project Site boundary.

Due to its rarity and disproportionately high habitat values and functions to wildlife, the CDFW considers riparian habitat to be sensitive. The CDFW would likely claim jurisdiction over areas at, and below, the top of bank lines on either side of the Guadalupe River, regardless of the vegetative composition of these areas. Riparian habitat associated with the Guadalupe River corridor does not occur within the Project Site boundary, however, and would not be directly or indirectly impacted by project activities.

No waters or wetlands of the U.S. or state occur within the Project Site.

Existing Trees

The City of San José maintains the urban landscape by controlling the removal of ordinance trees on private property (San José Municipal Code Section 13.32). Ordinance trees are defined as trees exceeding 38 inches in circumference, or approximately 12 inches in diameter, at a height of 4.5 feet above the ground. Ordinance trees are generally mature trees that help beautify the City, slow the erosion of topsoil, minimize flood hazards, minimize risk of landslides, increase property values, and improve local air quality.

A total of 424 trees were identified on-site. Out of the 424 trees, 157 trees were identified as ordinance-sized trees under the City's Tree Removal ordinance.³¹ Refer to Appendix F for the summary of existing trees.

³¹ Ordinance-size trees are defined as follows: Single Trunk - 38 inches or more in circumference at 4 1/2 feet above ground, or Multi-trunk - The combined measurements of each trunk circumference, at 4 1/2 feet above ground, add up to 38 inches or more in circumference. Source: HMM. *Arborist Report LBA Northtown Data Centers & Substation* May 12, 2025. Page 2.

Burrowing Owl Mitigation Agreement

The Project Site is located on parcels of land that were part of a 2001 mitigation agreement between Agilent Technologies, Inc., a former owner of the project property, and CDFW (Ref. No. 1802-2000-073-03) that provided for the purchase of off-site burrowing owl habitat in other, less developed and protected areas in the region to offset the loss of habitat on the property (inclusive of all areas of the Project Site). A portion of the mitigation agreement area is shown in Figure 4-2. A copy of the mitigation agreement is included as an appendix to the Biological Resources Assessment prepared for the Project. Although burrowing owls have not been recorded with certainty on the Project Site, the larger area covered by Agilent's mitigation agreement was formerly occupied by two pairs of nesting burrowing owls and one resident adult burrowing owl. Portions of this larger area have since been developed, and portions remain undeveloped. The purpose of the mitigation agreement was to offset the loss of burrowing owl habitat and provide for survival of the species in other areas outside of the South Bay. Agilent Technologies, Inc. provided mitigation at a ratio of 6.5 acres of burrowing owl habitat for each pair and single burrowing owl displaced from the area, in conformance with CDFW (then the California Department of Fish and Game) mitigation requirements at that time, for a total of 19.5 acres.

Provisions within Chapters 6 and 9 of the Habitat Plan exempt a project proponent from its conditions and/or fees provided the proponent provides to the Implementing Agency (the City of San José in this case) written confirmation from the CDFW and USFWS, as applicable, that specifically refers to the activity and states that such activity is not likely to result in the take of any state or federally listed species, and will not preclude the successful implementation of the conservation strategy of all covered species. In a letter dated November 15, 2012 to the City of San José, the CDFW confirmed that the terms of the mitigation agreement have been fulfilled and, per the terms of the agreement, that CDFW requires no additional mitigation for impacts on burrowing owls on the property (inclusive of the Project Site). According to the CDFW, "...any determination by the City regarding the property that was formerly the Agilent project area will not affect the City's ability to successfully implement the conservation strategy for the western burrowing owl described in the Habitat Plan and will not change the strategy." A copy of the letter is also provided in the Biological Resources Assessment. The applicant for the proposed project would not be required to provide a letter from the USFWS, as the burrowing owl is not a federally listed species.

The Habitat Plan contains a section known as Exhibit A: Corrections, Clarifications, and Updates to the Santa Clara Valley Habitat Plan (HCP/NCCP), dated April 4, 2013. In Section 1.2 Errata, 1.2.3, it states that the implementation of the Habitat Plan will not add or remove any of the rights and obligations to any development agreement between the Implementing Agency (in this case, the City of San José) and a private applicant. The provision applies to any mitigation agreement that was entered into and adopted prior to the operative date of the Habitat Plan and remains consistent with the City of San José's land use approvals for the project. There is a valid Mitigation Agreement for the subject property that was adopted in 2004, prior to the 2013 operative date of the Habitat Plan. Because of this, the SCVHA does not map the Project Site within a Burrowing Owl Fee Zone. Both the mitigation agreement and the letter from CDFW provide sufficient documentation to the

City of San José that the proposed development the Project Site, in conformance with the mitigation agreement, would not preclude the successful implementation of the conservation strategy for the burrowing owl.

The mitigation agreement states that the take of individual owls is prohibited per the California Fish and Game Code (Section 3503.3), and that no burrowing owls would be evicted from burrows during the nesting season (defined as February 1 to August 31). The eviction of burrowing owls outside the nesting season may be permitted as a means to avoid take, pending the evaluation of eviction plans and receipt of formal written approval from the CDFW authorizing the eviction. The project would be required to adhere to these requirements to avoid and minimize impacts on burrowing owls during project construction.

Under the current baseline condition, there have not been occupied burrowing owl nests observed within 0.5 miles during the last three years of the Habitat Plan surveys, and therefore the site is not considered to be occupied owl habitat, and the project is not subject to payment of the owl conservation fee. Nevertheless, should conditions change and a nesting pair of owls be surveyed within 0.5 miles of the site, the grassland portion of the project site within 0.5 miles of an active nest would become classified as occupied burrowing owl nesting habitat (i.e., suitable grassland habitat within 0.5 mile of a nest burrow that has been active in the prior three years).³²

³² H. T. Harvey & Associates. *NorthTown Data Center Biological Resources Report*. June 16, 2025. Page 43 and 44.



PROJECT BIOLOGICAL RESOURCE IMPACTS AND BURROWING OWL MITIGATION AGREEMENT

FIGURE 4-2

4.4.2 Impact Discussion

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

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

4.4.2.1 *Project Impacts*

-
- a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?
-

Impacts on California Annual Grassland

As mentioned in Section 4.4.1.2 Existing Conditions, the Project would result in 10.3 acres of permanent impacts on California annual grassland habitat, which would reduce the availability of this habitat. However, while the Project would result in the loss of California annual grassland habitat, this area of California annual grassland is regularly disturbed, located in a highly urbanized area, and does not provide regionally rare or especially high-value habitat for native vegetation or wildlife, or special-status species aside from the burrowing owl. Furthermore, California annual grassland is a widespread habitat within the Habitat Plan area. Since the quality of California annual grassland habitat that would be permanently impacted is not of high-value and would not reduce regional populations of animal species, impacts would be less than significant. **(Less than Significant Impact)**

Impacts on Water Quality and Special-Status Fish

No riparian habitat or waterways are within the Project Site boundaries. The Guadalupe River is adjacent to the western boundary of the Project Site, but the Project would be outside of the 100-foot riparian setback established by City policy for the river and an approximately eight-foot tall levee would contain any fuel leaks or spills from the Project. Additionally, as a project covered under the Habitat Plan, the Project would be required to comply with Condition 3 of the Habitat Plan, which states projects disturbing one acre or more must comply with the State requirements under the Municipal Regional Stormwater National Pollutant Discharge Elimination System General Construction Permit (as discussed more in Section 4.10 Hydrology and Water Quality). Compliance with this permit would reduce temporary impacts to water quality due to construction activities. With the lack of impacts to the Guadalupe River, along with compliance with the State water quality permit requirements, the Project would have no impact on water quality within the Guadalupe River or special-status fish species within the river channel. **(No Impact)**

Impacts on Nonbreeding Special-Status Species

As mentioned in Section 4.4.1.2 Existing Conditions, the tricolored blackbird, Bryant's savannah sparrow, grasshopper sparrow, golden eagle, and pallid bat could occur on the Project Site as nonbreeding migrants, transients, or foragers. However, the site does not provide important foraging habitat used regularly by any of these species. While construction activities could temporarily alter foraging patterns since the noise and activity levels could deter these wildlife species from traveling to the Project Site, the Project would not result in the loss of individuals since all the species mentioned could fly away from construction areas and equipment. Therefore, this impact would be less than significant. **(Less than Significant Impact)**

Impacts on the Monarch Butterfly

Due to the permanent impact to approximately 10.3 acres of California annual grassland, Project activities could result in the loss of larval host plants and adult nectar sources for monarch butterflies, and potentially also the loss of eggs, larvae, or pupae due to crushing by construction personnel or equipment, vegetation removal, excavations, and placement of soil stockpiles. However, these type of construction activities would occur on a site that lacks high densities of milkweed (larval host plant) or nectar plants, which indicates few monarch butterflies would be present. There is more suitable habitat to host monarch butterflies available in the Bay Area. Thus, due to the lack of any evidence that large numbers of monarch butterflies occur on the Project Site and the abundance of suitable habitat in the project region, Project activities are not expected to result in a substantial impact on breeding and foraging habitat for monarch butterflies. Therefore, the potential loss of small numbers of individuals as a result of the project, as well as the permanent loss of potential breeding and foraging habitat, would be a less than significant impact. **(Less than Significant Impact)**

Impacts on Yellow Warbler, San Francisco Common Yellowthroat, and White-Tailed Kite

The yellow warbler and San Francisco common yellowthroat (California species of special concern) could potentially nest immediately adjacent to the Project impact areas. The yellow warbler may nest in riparian trees along the Guadalupe River, and the San Francisco common yellowthroat may nest in herbaceous riparian vegetation along the Guadalupe River. The white-tailed kite (a state fully protected species) may nest in trees along the Guadalupe River or in landscape areas adjacent to the project site. Based on the February 2025 site visit, it is assumed that no more than one to two pairs of yellow warblers and San Francisco common yellowthroats and one pair of white-tailed kites could nest within or immediately adjacent to the Project Site. There are more of these special-status birds throughout the region.

Project construction would result in the permanent loss of suitable nesting and foraging habitat for the white-tailed kite along with increased temporary disturbance for all three species during the nesting season. The Project would also increase the number of human users of the Guadalupe River trail but this human-disturbance would not substantially disturb these special-status birds since the trail is already used frequently.

Given the abundance of these species in the region, project impacts on one or two pairs of yellow warblers, San Francisco common yellowthroats, and white-tailed kites would represent a marginal impact on their regional populations. Therefore, neither the potential loss of individual yellow warblers, San Francisco common yellowthroats, or white-tailed kites, nor the disturbance of nesting and foraging habitat, would have a substantial adverse effect, and these impacts would thus not constitute a significant impact on these species or their habitat. However, all native bird species are protected from direct take by federal and state statutes under provisions of the MBTA and CDFW code. The Project includes PDM (refer to PDMs BIO-1.1 through BIO-1.6, below) that would require the project to either restrict work to the non-nesting season (September 1 through January 31) or conduct preconstruction surveys prior to project activities and maintaining appropriate buffers around active nests of protected birds.

PDM BIO-1.1: Nesting Season Avoidance. To the extent feasible, commencement of construction activities should be scheduled to avoid the nesting season (September 1 through January 31, inclusive). If construction activities are scheduled to commence outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in Santa Clara County extends from February 1 through August 31, inclusive.

PDM BIO-1.2: Preconstruction Survey. If it is not possible to schedule commencement of construction activities and/or tree removal between September 1 and January 31, preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to

the initiation of demolition or construction activities or initiation of tree removal and pruning. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and up 300 feet from the impact areas for nests.

PDM BIO-1.3: Buffer zones. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and up 300 feet from the impact areas for nests. If active nests of protected species are found within project impact areas or close enough to these areas to affect breeding success, the ornithologist shall establish a species-specific work exclusion zone around each nest that shall be followed by the contractor. If an active nest is found within a distance that could result in disturbance, the ornithologist shall establish a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other bird species) to prevent nest disturbance.

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

PDM BIO-1.4: Buffer Monitoring. The project buffer shall be monitored on a frequency determined by the project ornithologist to verify compliance. After nesting is complete and all young have fledged, as determined by the ornithologist, the buffer would no longer be required, and tree removal may occur. If an active bird nest is discovered during demolition or construction, then a buffer zone shall be established under the guidelines specified above.

PDM BIO-1.5: Reporting. A report detailing the survey findings and any required buffer zones shall be submitted to the Director of Planning, Building, and Code Enforcement or the Director's designee for review and approval prior to tree removal and the issuance of a grading or demolition permit. The report shall contain maps showing the location of all nests, species nesting, status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and the buffer size around each nest (including reasoning behind any alterations to the initial buffer size). The report shall be provided within 10 days of completing a preconstruction nest survey.

PDM BIO-1.6: Worker Environmental Awareness Program. A qualified biologist shall be retained by the project owner/developer to conduct a Worker Environmental Awareness Program (WEAP) training focused on nesting bird protection for all construction personnel prior to the commencement of any ground disturbing activities during the nesting season. The training shall include a description of nesting bird species that may be encountered, regulatory protections under the Migratory Bird Treaty Act and California Fish and Game Code and other state and federal laws protecting birds, survey and buffer requirements during the nesting season, and proper protocols for reporting and avoiding impacts to active nests.

With implementation of PDM BIO-1.1 through BIO-1.6, impacts to the yellow warbler, San Francisco common yellowthroat, white-tailed kite, and common nesting birds would be less than significant.
(Less than Significant Impact)

Impacts on Burrowing Owls

While no burrowing owls or signs of burrowing owls were identified on-site during the February 2025 site visit, the Project may impact burrowing owls as a result of the permanent removal of foraging habitat and disturbance of individuals (e.g., nesting and/or roosting) during construction. There is a record of burrowing owls being present in the surrounding area as described in Section 4.4.1.2 Existing Conditions above. Therefore, occasional migrant burrowing owls could roost on one of the nearby properties where burrows of California ground squirrels are present, and use the grasslands on the Project Site for foraging.

Impacts on Individual Burrowing Owls

Due to the absence of California ground squirrels burrows on the Project site, the direct loss of an individual burrowing owl due to project construction is not expected to occur. However, the possibility that owls could occupy the site prior to construction cannot be ruled out, and construction activities that occur in close proximity to active burrows located on the site or on adjacent properties may disturb owls, potentially to the point of abandoning their burrows. Burrowing owls that are flushed from their burrows would be subject to increased risk of mortality due to predation. In addition, should burrowing owls abandon an active nest burrow, the Project could result in the incidental loss of eggs or nestlings due to abandonment. The loss of individual burrowing owls that are flushed from their burrows (e.g., due to predation) and the loss of eggs or young in nests due to abandonment would be considered significant under CEQA due to the low and declining regional populations of the species.

The project would adhere to the requirements of the existing mitigation agreement, which will help to reduce project impacts on burrowing owls and their habitat. Applicable measures from the mitigation agreement are as follows.

- No burrowing owls shall be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted as a means to avoid take, pending evaluation of eviction plans and receipt of formal written approval from the CDFW authorizing the eviction.
- A protected area 250 feet in radius, within which no new activity shall be permissible, shall be maintained between project activities and nesting burrowing owls or individual resident burrowing owls. This protected area shall remain in effect between February 1 and August 31, or, at CDFW's discretion and based upon monitoring evidence, until any young owls are foraging independently. In the non-nesting season (September 1 through January 31), a protected area 165 feet in radius, within which no new activity shall be permissible, shall be maintained between project activities and burrows occupied by burrowing owls. Any development within these protected radii shall be approved beforehand in a Memorandum of Understanding or Mitigation agreement with the CDFW. Notwithstanding anything to the contrary in this paragraph, the CDFW has the discretion to shorten the nesting season period based on evidence the CDFW deems satisfactory.
- If accidental take occurs, the applicant shall contact the CDFW immediately.

To support compliance with these measures, and per the requirements of the Habitat Plan and the City of San José, the project shall conduct preconstruction surveys for burrowing owls consistent with the methodology provided in Condition 15 of the Habitat Plan as follows:

- **Preconstruction Surveys.** Prior to any ground disturbance related to covered activities, a qualified biologist shall conduct preconstruction surveys in all suitable habitat areas as identified during habitat surveys. The purpose of the preconstruction survey is to document the presence or absence of burrowing owls on the Project Site, particularly in areas within 250 feet of construction activity.

To maximize the likelihood of detecting owls, the preconstruction survey shall last a minimum of three hours. The survey shall begin one hour before sunrise and continue until two hours after sunrise (for three hours total) or begin two hours before sunset and continue until one hour after sunset. Additional time may be required for large Project Sites. A minimum of two surveys shall be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed shall be counted and their locations shall be mapped.

Surveys shall conclude no more than two calendar days prior to construction. Therefore, the project proponent must begin surveys no more than four days prior to construction (two days of surveying plus up to two days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the project proponent may also conduct a preliminary survey up to 14 days before construction.

This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than two calendar days in advance of construction.

- **Avoidance Measures During Construction – Breeding Season.** If evidence of western burrowing owls is found during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance will include establishment of a 250-foot non-disturbance buffer zone around nests. Construction may occur outside of the 250-foot non-disturbance buffer zone. Construction may occur inside of the 250-foot non-disturbance buffer during the breeding season if:
 - The nest is not disturbed, and
 - The project proponent develops an avoidance, minimization, and monitoring plan that will be reviewed by the Habitat Agency and the Wildlife Agencies prior to project construction based on the following criteria.
 - The Habitat Agency and the Wildlife Agencies approve of the avoidance and minimization plan provided by the project proponent.
 - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
 - The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
 - If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities will cease within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until the adults and juveniles from the occupied burrows have moved out of the project site.
 - If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the non-disturbance buffer zone may be removed. The biologist will excavate the burrow to prevent reoccupation after receiving approval from the Wildlife Agencies.

The Habitat Agency and the Wildlife Agencies have 21 calendar days to respond to a request from the project proponent to review the proposed avoidance, minimization, and monitoring plan. If these parties do not respond within 21 calendar days, it will be presumed that they concur with the proposal and work can commence.

- **Avoidance Measures During Construction – Nonbreeding Season.** During the non-breeding season (September 1–January 31), the project proponent will establish a 250-foot non-

disturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 250-foot buffer are allowed. Construction activities within the non-disturbance buffer are allowed if the following criteria are met in order to prevent owls from abandoning important overwintering sites.

- A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
 - The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
 - If there is any change in owl foraging behavior as a result of construction activities, these activities will cease within the 250-foot buffer.
 - If the owls are gone for at least 1 week, the project proponent may request approval from the Habitat Agency that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.
 - Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.
- **Construction Monitoring.** Based on the avoidance, minimization, and monitoring plan developed (as mentioned above), during construction, the non-disturbance buffer zones will be established and maintained as applicable. A qualified biologist will monitor the site consistent with the requirements described above to ensure that buffers are enforced and owls are not disturbed. The biological monitor will also conduct training of construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl enters an active construction zone.

With implementation of the measures contained in the mitigation agreement and Condition 15, development of the Project would not significantly impact individuals of burrowing owls. **(Less than Significant Impact)**

Impacts on Burrowing Owl Habitat

The loss of burrowing owl habitat on the Project Site has been mitigated previously via the purchase of off-site burrowing owl habitat in other, less developed and protected areas in the region, as documented in a mitigation agreement with the CDFW as described above in Section 4.4.1.2 Existing Conditions. However, should an owl nest within 0.5 mile of the site within any of the three years immediately prior to project implementation, the loss of grassland habitat on the site located within 0.5 mile of burrowing owl a nest could be considered biologically significant to owls in the South Bay region.

Feasible mitigation for the loss of occupied burrowing owl nesting habitat on the site that will directly benefit the South Bay burrowing owl population has been made available since the mitigation agreement was finalized due to the adoption of the Habitat Plan, to which the City of San

José is signatory. The Habitat Plan's vast conservation program conserves numerous habitats, including grasslands and other habitats, which provide roosting and foraging habitat for burrowing owls in the project region. Therefore, payment of the Habitat Plan burrowing owl specialty fee would contribute to a conservation program that benefits the local burrowing owl population, and would reduce potential project impacts on occupied burrowing owl nesting habitat to less than significant levels.

If nesting burrowing owls are absent from areas within 0.5 mile of the site for the three years immediately prior to project implementation (as mapped by the Habitat Agency and based on the results of the project's pre-activity surveys as well as other surveys regularly performed in the area), project impacts due to the loss of local burrowing owl habitat on the site would be less than significant. However, if burrowing owls are detected nesting within 0.5 mile of the project site prior to project construction, the project would implement PDM BIO-2 below to pay burrowing owl specialty fees to offset the loss of occupied nesting habitat.

PDM BIO-2: Pay Habitat Plan Burrowing Owl Fees for Impacts on Occupied Nesting Habitat. Prior to the issuance of any demolition, grading, or tree removal permit (whichever occurs first), the Project shall pay the Habitat Plan burrowing owl fees for the portion of California annual grassland that is permanently lost and located within 0.5 mile of a burrow that has been used for nesting within the three years prior to the start of construction, as mapped in the Habitat Agency's burrowing owl fee zone or based on the results of the project's pre-activity surveys and other surveys regularly performed in the area.

As previously mentioned, the mitigation agreement between Agilent and CDFW negated the need for compensatory mitigation, such as payment of Habitat Plan impact fees. However, payment of VHP burrowing owl fees would be appropriate to reduce the project's contribution to cumulative impacts on burrowing owls to less than significant levels if a burrowing owl nest is detected within 0.5 mile of the project site's grassland because these fees would directly benefit burrowing owls in the South Bay region. PDM BIO-2 would be consistent with the Habitat Agency's Voluntary Fee Payments Policy, where voluntary payment burrowing owl fees is used to mitigate significant impacts to burrowing owls. Therefore, payment of Habitat Plan fees are appropriate to compensate for direct, indirect, and cumulative impacts on burrowing owls as a result of the Project. **(Less than Significant Impact)**

Impacts on Crotch's Bumble Bee

As stated in Section 4.4.1.2 Existing Conditions, Crotch's bumble bee may be present on the Project Site but the site only provides low-quality habitat. There is more abundant suitable foraging habitat in the foothills of the Diablo Range and along Coyote Ridge. Therefore, Crotch's bumble bee is unlikely to occur on the site and unlikely to be impacted by the project. If construction activities were to result in the potential loss of individual Crotch's bumble bees, then Project Construction would impact only a small number of individuals/nests representing a very small proportion of the

species' regional population. For these reasons, the Project would not have a substantial adverse effect on Crotch's bumble bee since there is high-quality nesting and foraging habitat for this species in other regions of the Bay Area and a low probability of the species being present on the site. **(Less than Significant Impact)**

Impacts on the Northwestern Pond Turtle

The likelihood that the northwestern pond turtle, occurring along the Guadalupe River, would be present on-site is extremely low. However, this species could potentially access the project site via an approximately 10-inch diameter hole at the base of the chain-link fence that separates the Project Site from the river. A portion of grassland (which is suitable nesting habitat for the pond turtles) along the southern portion of the site, adjacent to the paved driveway, would potentially be accessible to this species. Construction activities could harm or disturb individual turtles or their eggs if present in the site work areas.

The Habitat Plan does not provide specific species-level avoidance and minimization measures for the northwestern pond turtle. However, the Project would be required to adhere to all conditions noted in the Habitat Plan (as applicable) including Condition 3 (Maintain Hydrologic Conditions and Protect Water Quality) and Condition 11 (Adhere to Stream and Riparian Setbacks). These conditions would minimize potential Project impacts on the northwestern pond turtle and its habitat. Since the Project would comply with all relevant Habitat Plan conditions, impacts on the northwestern pond turtle would be less than significant. **(Less than Significant Impact)**

Impacts due to Bird Collisions

The Project Site is situated east of the Guadalupe River where there is high bird diversity and urban development that has nonnative vegetation (trees and shrubs) that support a lower number of birds. Due to the mix of nonnative and native trees on-site, the number of individual birds that inhabit and regularly use vegetation on the Project Site at any given time is low under existing conditions. Under the Project, similar habitat and foraging patterns are presumed since more landscaping trees would be planted on-site to offset the removal of existing mature trees (native and nonnative). Overall, it is not expected that the Project Site provides high-quality habitat to support high bird diversity. However, birds that inhabit the riparian habitat within the Guadalupe River area are abundant and likely to disperse outward to other areas (including the Project Site) for feeding and resting opportunities. The migration of birds from Guadalupe River through the Project Site could result in bird collisions with the new proposed data center buildings. There is potential for a moderate number of birds to collide with the glazed facades of the proposed DC West and DC North buildings as there is connectivity of landscape vegetation between Guadalupe River and the Project Site.

Birds would potentially collide with glazing on façades of the DC North and DC West buildings for the following reasons:

- Birds may be unable to distinguish building facades as solid features to avoid
- Birds may mistake proposed landscaping vegetation reflected in the building facades as real vegetation and strike the glass
- Reflections of the sky in the glass façade may be perceived by birds as an open flight path instead of solid glass
- Night lighting may disorient birds and cause them to collide with the buildings

To reduce bird collisions and integrate bird-safe designs into the Project, the following PDM would be implemented.

PDM BIO-3: Bird Collision. Due to the potential for bird collisions with the DC North and DC West buildings, the project shall implement the following bird-safe building design considerations for these facades:

- Reduce the extent of glass on building facades, to the extent feasible (as determined in consultation with the City and consistent with any City building design standards and California Building Code requirements).
- Reduce or eliminate the visibility of plants behind glass.
- All glazing used on the building facades shall have a reflectivity index of no more than 20 percent. Any bird-safe glazing shall have a reflectivity index of no more than 15 percent.
- No more than 10 percent of the surface area of the combined façades for each building shall have untreated glazing between the ground and 60 feet above ground. Bird-safe glazing treatments may include fritting, netting, permanent stencils, frosted glass, exterior screens, physical grids placed on the exterior of glazing or ultraviolet patterns visible to birds. Bird-safe treatments shall have the following specifications, to ensure they are sufficiently effective:
 - Vertical elements of the window patterns shall be at least 0.25 inch wide at a maximum spacing of 4 inches or have horizontal elements at least 0.125 inch wide at a maximum spacing of 2 inches.
 - OR
 - Bird-safe glazing shall have a Threat Factor³³ less than or equal to 30.

³³ A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at <https://abcbirds.org/glass-collisions/products-database/>.

- Avoid free-standing clear glass walls, skywalks, transparent building corners, glass enclosures (e.g., greenhouses) on rooftops, and free-standing clear glass railings where feasible. If any such features are included in the project design, all glazing used in any such features shall be 100 percent treated as specified above. These features shall be treated to a height of 60 feet above grade. Features located more than 60 feet above grade are not required to be treated. For transparent glass corners, the required treatment area extends horizontally from a building corner as far the corner as it is possible to see through the corner to the other side of the building.
- Landscaping, including planted vegetation and water features, shall be designed to minimize the potential for collisions adjacent to glazed building facades. For example, vegetation providing particularly valuable resources to birds (such as fruits) shall be planted away from glass facades, and vegetation in general shall be planted in such a way that it is not clearly reflected in windows. Water features shall be located away from building exteriors to reduce the attraction of birds toward glazed facades.

Due to the potential for night lighting to disorient birds, the project shall implement the following bird-safe design considerations for all new interior and exterior lighting on the project site:

- Minimize exterior lighting to the extent feasible, except as needed for safety/security. All exterior lights shall be shielded and directed toward facilities on the project site to ensure that light is not directed upward or outward toward the Guadalupe River.
- Occupancy sensors or other switch control devices shall be installed on interior lights, with the exception of emergency lights or lights needed for safety/security purposes. If occupancy sensors are not active, these lights shall be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.
- To the extent consistent with the normal and expected operations of commercial uses under the project, take appropriate measures to avoid use of unnecessary lighting at night. Such measures may include the installation of motion-sensor lighting, automatic light shut-off mechanisms, downward-facing exterior light fixtures, the use of Dark-Sky-approved lighting³⁴, and others.

³⁴ Exterior lighting fixtures that meet the International Dark-Sky Association's standards for artificial lighting minimize glare while reducing light trespass and skyglow, and are required to be fully shielded and minimize the amount of blue light in the nighttime environment (International Dark-Sky Association 2025).

Site plans demonstrating incorporation of the above measures shall be reviewed and approved for effectiveness by a qualified ornithologist. The site plans approved by the qualified ornithologist shall be submitted to the Director of Planning, Building and Code Enforcement or the Director's designee for approval prior to the issuance of any planning permit.

The implementation of PDM BIO-3 would incorporate bird-safe design elements into the project design, reducing bird collision impacts to a less than significant level and support project compliance with the bird-safe design guidance provided in the City of San José Riparian Corridor Protection and Bird-Safe Design Policy. **(Less than Significant Impact)**

Impacts due to Increased Lighting

Construction of the Project would result in new sources of light around the Project Site. Sources would include light fixtures illuminating buildings, building architectural lighting, and parking lot and pedestrian lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting could potentially spill into adjacent natural areas, thereby resulting in an increase in lighting compared to existing conditions. Areas to the northwest, northeast, and southeast are primarily developed urban habitats that do not support sensitive species that might be significantly impacted by illuminance from the project. However, the riparian and wetland habitats along the Guadalupe River provide suitable habitat for a variety of wildlife species, including sensitive species such as the San Francisco common yellowthroat, and are close enough to the Project Site to be affected by an increase in lighting.

The Guadalupe River levee would provide some barrier to light spilling from the Project Site; however, the levee is only approximately eight feet tall and would be unable to block all light illuminated from the proposed data center buildings and within the proposed parking lots. Thus, lighting from the Project could increase in the adjacent natural areas and disrupt the natural behaviors of species in the Guadalupe River riparian habitat. However, implementation of PDM BIO-3 noted above would minimize the spillover of lighting and would therefore reduce this impact to a less than significant level. **(Less than Significant Impact)**

Impacts due to Increased Noise Levels

The wildlife inhabiting the Guadalupe River is acclimated to some existing noise levels from the surrounding areas already (approximately 61 to 67 decibel, A-weighted [dBA] during the day and 54 to 66 dBA at night, with frequent peaks of approximately 77 to 83 dBA due to aircraft). The Project would generate noise from construction activities (e.g., equipment and trucks) and during operation (e.g., testing of emergency generators for maintenance purposes). During construction, noise levels along the Guadalupe River would increase to regular or sustained levels of approximately 65 to 82 dBA over 39 months. During operation, noise levels would be approximately 60 dBA during normal operating conditions and approximately 64 dBA when the emergency generators would be tested. The noise that would be caused by the Project during construction and

operation would be lower or similar than the peak aircraft noise levels. Therefore, the Project would not generate new noise levels that wildlife along the Guadalupe River is not already acclimated to. Therefore, impacts due to construction and/or operational activities on the site would be less than significant. **(Less than Significant Impact)**

Nitrogen Deposition Impacts

The Habitat Plan covers impacts from nitrogen deposition since increased NO_x emissions from new developments (e.g., vehicles) contribute effects of nitrogen deposition on serpentine grassland ecosystems. While the Project Site has no serpentine grassland, the 378 new operational trips per day that would be generated from the Project would emit more NO_x that could disperse and contribute to the nitrogen deposition impacts to serpentine habitat elsewhere in the Habitat Plan. To reduce the impacts of nitrogen deposition, the Habitat Plan includes an impact fee to mitigate airborne nitrogen deposition from covered activities. The amount of the fee is based on the number of new daily vehicle trips generated by a covered activity. The fee-per-vehicle-trip is a surrogate that captures the overall effects of a project, recognizing that vehicle trips are not the only source of a project's NO_x emissions. The following PDM, based on the City's Standard Permit Condition, would ensure compliance with the Habitat Plan.

PDM BIO-4: **Santa Clara Valley Habitat Plan Nitrogen Deposition Fee.** Prior to the issuance of any demolition, grading, or tree removal permit (whichever occurs first), the Project shall pay Santa Clara Valley Habitat Plan nitrogen deposition fees. The Project Applicant shall submit the Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of Planning, Building & Code Enforcement or the Director's designee for approval and payment of the nitrogen deposition fees prior to the issuance of a grading permit.

With PDM BIO-4 the Project would be required to pay the mandatory nitrogen deposition impact fee, which would reduce impacts related to Project's NO_x emissions in relation to biological resources. **(Less than Significant Impact)**

-
- b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?
-

The Guadalupe River is adjacent to the western boundary of the Project Site. However, the Guadalupe River does not flow through the Project Site. All ground-disturbing and construction activities associated with the Project would occur outside of the Guadalupe River and its associated riparian corridor. The Project would be designed to be setback at a minimum of 100 feet from the Guadalupe River riparian corridor in accordance with the City of San José's Riparian Corridor Protection and Bird-Safe Design Council Policy (Policy Number 6-34). No new structures, hardscape, nor landscape would be constructed within the setbacks. Therefore, the proposed Project would

not have temporary impacts nor direct permanent on riparian habitat. **(Less than Significant Impact)**

- c) Would the project have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means?
-

As mentioned in Section 4.4.1.2 Existing Conditions, the Project Site does not contain wetland areas. While the Project Site is adjacent to the Guadalupe River, where Waters of the United States and State are present, the Project would not disturb or encroach into the river. Therefore, the proposed Project would not impact state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

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

Migratory movements of animal species are most often associated with riparian corridors. The nearest riparian corridor is Guadalupe River, which is adjacent to the western boundary of the DC West site. The Guadalupe River and the associated riparian corridor provide an important movement pathway for both aquatic and terrestrial wildlife species, connecting the associated wetlands to the San Francisco Bay.

Although the proposed Project and Intersection Improvement Area will not result in any loss of aquatic, wetland, or riparian habitat along the Guadalupe River or in any substantial reduction in the value of the Guadalupe River corridor for wildlife movement, the Project could increase the number of human users of the Guadalupe River Trail. New users of the trail would potentially subject wildlife in the riparian corridor to increased human disturbance. However, this trail is already heavily used by pedestrians and cyclists, which regularly introduces human disturbance within the riparian habitat. Therefore, the potential increase in users of the Guadalupe River Trail as a result of this Project is not expected to contribute substantially to human disturbance of animals using the Guadalupe River corridor. Aquatic and terrestrial species would continue to be able to move north to south along the Guadalupe River following Project development. Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

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

As described in Section 4.4.1.2 Existing Conditions, the site features 424 trees of which 157 are ordinance-sized according to the City of San José's Municipal Code Title 13. Construction of the Project would result in the removal of trees, which requires a Tree Removal Permit from the City of San José. The Project Applicant would be required to replace removed trees using the City's tree replacement ratios. The species of trees to be planted would be determined in consultation with the City Arborist and the Department of Planning, Building and Code Enforcement. The proposed Project would be required to conform to the replacement requirements as identified in the Municipal Code Section 13.28.300, General Plan Policies MS-21.4, MS-21.5, MS-21.6 and CD-1.24 and City of San José Tree Removal Ordinance (Municipal Code Section 13.31.010 to 13.32.100). The City's Standard Permit Condition for tree planting would be implemented by the Project as a PDM.

PDM BIO-5: **Tree Removal Permit.** Prior to any tree removal, a tree removal permit shall be obtained from the City of San José. The removed trees would be replaced according to tree replacement ratios required by the City as outlined in Table 4.4-1.

Table 4.4-1: Tree Replacement Ratios

Circumference of Tree to be Removed	Replacement Ratio - Native	Replacement Ratio – Non-Native	Replacement Ratio - Orchard	Minimum Size of Each Replacement Tree**
38 inches or more	5:1*	4:1	3:1	15-gallon
19 up to 38 inches	3:1	2:1	none	15-gallon
Less than 19 inches	1:1	1:1	none	15-gallon

*x:x = tree replacement to tree loss ratio

Note: Trees greater than or equal to 38-inch circumference measured at 54 inches above natural grade shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees. For Multi-Family residential, Commercial and Industrial properties, a permit is required for removal of trees of any size.

A 38-inch tree equals 12.1 inches in diameter.

** A 24-inch box replacement tree = two 15-gallon replacement trees

Single Family and Two-dwelling properties may replace trees at a ratio of 1:1.

- Prior to the issuance of building permit(s), the permittee shall pay Off-Site Tree Replacement Fee(s) to the City for off-site replacement trees in accordance with the City Council approved Fee Resolution in

effect at the time of payment for any replacement trees that cannot be located on-site.

- If there is insufficient area on the Project Site to accommodate the required replacement trees, one or more of the following measures shall be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement or Director's designee. Changes to an approved landscape plan requires the issuance of a Permit Adjustment or Permit Amendment.
 - The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees to be planted on the Project Site.
 - Pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of building permit(s), in accordance with the City Council approved Fee Resolution in effect at the time of payment. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

By conforming to the standard permit conditions through implementation of PDM BIO-5, the proposed Project would meet all applicable tree removal and tree protection requirements set forth by the City of San José. Therefore, the proposed Project would not conflict with any ordinance protecting biological resources and would not result in a significant impact to trees and the community forest. **(Less than Significant Impact)**

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

The Project is located within the Habitat Plan Urban Service Area for the City of San José. As a result, the Project would be required to comply with the Habitat Plan conditions, which includes paying applicable Habitat Plan fees and/or complying with specific Habitat Plan conditions to reduce impacts to biological resources. The Project would be required to comply with the following applicable Habitat Plan Conditions:

- **Condition 1. Avoid Direct Impacts on Legally Protected Plant and Wildlife Species:** Several wildlife species that occur in the project vicinity are protected under state and federal laws. Some of these animal species are listed as fully protected under the California Fish and Game Code (e.g., the white-tailed kite), and eagles are protected under the Bald and Golden Eagle Protection Act. Further, all native bird species and their nests are protected under the MBTA and California Fish and Game Code. Actions conducted under the Habitat Plan must comply with the provisions of the MBTA and California Fish and Game Code.

- Condition 3. Maintain Hydrologic Conditions and Protect Water Quality:** Condition 3 applies to all projects and identifies a set of programmatic BMPs, performance standards, and control measures to minimize increases of peak discharge of storm water and to reduce runoff of pollutants to protect water quality, including during project construction. These requirements include preconstruction, construction site, and post-construction actions. Preconstruction conditions are site design planning approaches that protect water quality by preventing and reducing the adverse impacts of stormwater pollutants and increases in peak runoff rate and volume. They include hydrologic source control measures that focus on the protection of natural resources. Construction site conditions include source and treatment control measure to prevent pollutants from leaving the construction site and minimizing site erosion and local stream sedimentation during construction. Post-construction conditions include measures for stormwater treatment and flow control.
- Condition 11. Stream and Riparian Setbacks:** Condition 11 applies to covered projects that may affect streams and associated riparian vegetation within the Habitat Plan area. This condition requires new covered projects to adhere to setbacks from creeks and streams and associated riparian vegetation to minimize and avoid impacts on aquatic and riparian land cover types, covered species, and wildlife corridors. The standard required setback for the reach of Guadalupe River (a Category 1 stream) on the project site is 100 feet from the top of bank because the slope of the project site is less than 30 percent, no areas 35 feet from the edge of riparian vegetation extend past the 100-foot buffer, and the project site is located inside of Habitat Plan-designated urban service areas. However, some exemptions may be applicable depending on the nature of the channel. The 100-foot setback along the Guadalupe River does not overlap the Project Site. However, no improvements are proposed within the setback, and no construction activities will result in temporary impacts within this area. Therefore, the project complies with Condition 11.
- Condition 15. Western Burrowing Owl / Burrowing Owl Mitigation Agreement:** Condition 15 requires the implementation of measures to avoid and minimize direct impacts on burrowing owls, including preconstruction surveys, establishment of 250-foot non-disturbance buffers around active nests during the breeding season (February 1 through August 31), establishment of 250-foot non-disturbance buffers around occupied burrows during the nonbreeding season, and construction monitoring. Preconstruction surveys for burrowing owls are required by the Habitat Plan in areas mapped as breeding habitat.
- Condition 17. Tricolored Blackbird:** This condition applies to projects that are located within 250 feet of any riparian, coastal, and valley freshwater marsh and helps to protect tricolored blackbirds by prescribing preconstruction surveys, construction buffer zones, biological monitoring, and other requirements. If a project is located within 250 feet of habitat mapped as pond by the Habitat Plan, a qualified biologist must confirm that the pond land cover type is present. If a qualified biologist verifies that the project area is within 250 feet of pond habitat, a qualified biologist must conduct a field investigation to identify and map potential nesting substrate. If suitable nesting substrate is identified, avoidance and minimization measures must be implemented (see pages 4-43 to 4-44 of the Habitat Plan). No tricolored blackbird nesting colonies are expected to occur on or within 250 feet of the

site, and no additional surveys or avoidance and minimization measures pertaining to this species are required.

For Habitat Plan impact fees, the Project Site (including the Intersection Improvement Area) fall entirely within Urban Areas, which is a no land cover fee zone. The Project Site also does not include special fee zones for burrowing owls, wetland, or serpentine. However, as mentioned under checklist question a), the Project shall pay the Habitat Plan burrowing owl impacts fees per PDM BIO-2, for the portion of California annual grassland on the site that is permanently lost and located within 0.5 mile of a burrow that has been used for nesting within the prior three years prior to the start of construction and as mapped in the Habitat Plan's burrowing owl fee zone or based on the results of the project's pre-activity surveys and other surveys regularly performed in the area. The Project would generate approximately 378 vehicle trips per day and would be required to pay fees for nitrogen emissions associated with the vehicle trips per PDM BIO-4.

With compliance with the Habitat Plan Conditions and implementation of the PDMs that require payment of the nitrogen deposition Habitat Plan fee, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan. **(Less than Significant Impact)**

4.4.2.2 *Cumulative Impacts*

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

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. Future development activities in San José and development activities covered by the Habitat Plan would result in impacts on the same habitat types and species that will be affected by the proposed project. The Project, in combination with other projects in the area and other activities that impact the species that are affected under the project, could contribute to cumulative effects on special-status species. Other projects in the area include both development and maintenance projects that could adversely affect these species and restoration projects that will benefit these species.

The cumulative impact on biological resources resulting from the Project in combination with other projects in the region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by (1) planning documents, CEQA mitigation measures, and permit requirements for each project; (2) compensatory mitigation and proactive conservation measures associated with each project; and (3) the benefits to biological resources accruing from the Habitat Plan. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

As discussed above, the Project could result in the loss of suitable grassland habitat for burrowing owls should an owl nest within 0.5 mile of the site within any of the three years immediately prior to project implementation. Impacts on burrowing owls resulting from development of the property were previously analyzed in the original North San José Development Policies Update Draft Program EIR as well as the Agilent Final EIR. Although compensatory mitigation was provided in accordance with a CDFW mitigation agreement, that mitigation consisted of the purchase of credits in a conservation bank outside the South Bay, so that the mitigation did not directly benefit the South Bay burrowing owl population. As a result, this loss of habitat was previously disclosed as a significant and unavoidable impact due to the cumulative loss of burrowing owl habitat in the South Bay region in the original North San José Development Policies Update Draft Program Environmental Impact Report as well as the Agilent Final EIR. However, the adoption of the Habitat Plan has created the opportunity for feasible mitigation to be implemented to directly benefit the South Bay burrowing owl population. The Project would implement PDM BIO-2 to reduce the Project's contribution to cumulative impacts on burrowing owls.

Additionally, the City's General Plan Habitat Plan includes numerous conservation measures to offset adverse effects on covered activities. Many projects in the region that impact resources similar to those impacted by the proposed project would be covered activities under the Habitat Plan and would mitigate impacts on sensitive habitats and many special-status species through that program, which will require payment of fees for habitat restoration. Furthermore, the project would implement PDMs (refer to PDM BIO-1.1 through BIO-1.6, PDM BIO-2, PDM BIO-3, PDM, BIO-4, and PDM BIO-5) to reduce impacts on both common and special-status species, including burrowing owls, as described above. Therefore, the project would not contribute to substantial cumulative effects on biological resources. **(Less than Significant Cumulative Impact)**

4.5 Cultural Resources

The discussion in this section is based in part on a Cultural Resources Report prepared for the Project by Chronicle Heritage in June 2025. A copy of the report will be docketed with the Commission under a Request for Confidentiality. In this report mitigation measures are recommended to reduce impacts. The Applicant has incorporated these recommendations into PDMs as discussed below.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following characteristics:
 - Association with events that have made a significant contribution to the broad patterns of history;
 - Association with the lives of persons significant in the past;
 - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction; or
 - Has yielded, or may yield, information important to prehistory or history.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.³⁵

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource’s eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county

³⁵ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” Accessed May 22, 2024.
<http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.

coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

Historic Preservation Ordinance

The City of San José Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code) provides a framework for the City to identify, protect, and encourage the preservation of significant resources and foster civic pride in the City's cultural resources. The Historic Preservation Ordinance establishes processes for the designation of City Landmarks, City Landmark Districts and Conservation Areas, review of proposed exterior alterations to designated City Landmarks and properties within City Landmark Districts and Conservation Area, maintenance of a Historic Resources Inventory (HRI), and administration of Mills Act Contracts.

The City of San José also uses the significance criteria for City Landmark eligibility to evaluate properties that are 45 years or older that have not previously been determined to be a significant historical resource under CEQA (Discretionary Resource). Properties that meet the eligibility criteria for listing in the San José Historic Resources Inventory as a Candidate City Landmark have special historical, architectural, cultural, aesthetic, or engineering interest or value of a historical nature and are significant under at least one of the following criteria:

1. Its character, interest or value as a part of the local, regional, State or national history, heritage or culture
2. Its location as a site of a significant historic event
3. Its identification with a person or persons who significantly contributed to the local, regional, State or national culture and history
4. Its exemplification of the cultural, economic, social or historic heritage of the city of San José
5. Its portrayal of the environment of a group of people in an era of history characterized by a distinctive architectural style
6. Its embodiment of distinguishing characteristics of an architectural type or specimen
7. Its identification as the work of an architect or master builder whose individual work has influenced the development of the city of San José
8. Its embodiment of elements of architectural or engineering design, detail, materials or craftsmanship which represents a significant architectural innovation, or which is unique.

San José Historic Resources Inventory

Consistent with the City's Historic Preservation Ordinance, in 1975, the City developed an inventory of historically and architecturally significant structures. The inventory now includes approximately 4,000 properties, including designated City Landmarks and City Landmark Districts.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to cultural resources. The following are applicable to the Project. The following cultural-resources-related General Plan policies are applicable to the Project.

Policy	Description
ER-10.1	For proposed development sites that have been identified as archaeologically or paleontologically sensitive, requiring investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into project design.
ER-10.2	Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.
ER-10.3	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources to ensure that adequate protection of historic and pre-historic resources.

4.5.1.2 *Existing Conditions*

Archaeological Resources

A record search at the Northwest Information Center (NWIC) of the California Historical Resources Information Systems (CHRIS) and a literature review were completed to establish the archaeological sensitivity of the project site for both Native American and historic-period archaeological resources. The record search was submitted to NWIC on January 25, 2025 and covered the Project Site and a surrounding one-mile buffer. The record search identified 12 resources within the requested search area. Of the 12 previously recorded resources, six are precontact sites, five are historical sites, and one is a multicomponent (pre-historic and historic) site. None of the 12 resources intersect the Project Site (including the Intersection Improvement Area).³⁶

³⁶ Chronicle Heritage. *Cultural Resource Technical Report for the NorthTown Data Center Project*. June 2025. Page 23.

A Sacred Lands File Search request was also submitted to the Native American Heritage Commission (NAHC) on January 25, 2025. A response was received on January 26, 2025 stating the search results were negative.³⁷

In addition to the literature review, a pedestrian field survey of the project site was completed on April 2, 2025. Due to the dense vegetation on the DC North and DC West (closer to the Guadalupe River Trail) sites, ground visibility was low with the ground surface only being visible in disturbed areas (e.g., rodent holes). No cultural resources were observed during the survey.³⁸

Native American Resources

Native Americans occupied Santa Clara Valley and the greater Bay Area for more than 5,000 years. The exact time period of the Ohlone (originally referred to as Costanoan) migration into the Bay Area is debated by scholars. Dates of the migration range between 3,000 B.C. and 500 A.D. Regardless of the actual time frame of their initial occupation of the Bay Area and, in particular, Santa Clara Valley, it is known that the Ohlone had a well-established population of approximately 7,000 to 11,000 people with a territory that ranged from the San Francisco Peninsula and the East Bay south through the Santa Clara Valley and down to Monterey and San Juan Bautista.

Archaeological sites are most often found in flat locations with access to a perennial source of fresh water. Soils deposited during the Holocene era (since 11,700 years ago), especially young alluvium from the last 2,000-3,000 years, are more likely to contain buried archaeological deposits. In Santa Clara County, Native American sites are most often found within ½-mile of major watercourses and ¼-mile of minor watercourses.

The Project Site is adjacent to the Guadalupe River. The site's proximity to a waterway and identified resources (as mentioned above), indicates the Project Site has moderate to high potential for buried Native American archaeological deposits and buried archaeological deposits.³⁹

Historic-Period Subsurface Resources

Historic-period activities may also lead to the creation of archaeological features or deposits. These can include structural remains such as walls, foundations, cellars, or wells; or landscape features such as roads, levees, fence lines, ponds, dams, or embankments. Per historical and topographic maps, the project site was architectural fields and orchards from about 1931 to 1980. By the 1980s, the project site and surrounding area had been developed with industrial and commercial buildings.⁴⁰

Since there has been additional development on the project site beyond the industrial buildings, which still exist today, there is low likelihood for the creation of other archaeological features or

³⁷ Ibid. Page 38.

³⁸ Ibid. Page 40.

³⁹ Ibid. Page 69.

⁴⁰ Ibid. Pages 35 to 38.

deposits. For these reasons, the Project Site likely has low sensitivity for subsurface historic-period archaeological resources.

Historical Resources

A pedestrian survey to evaluate the built environment within the Project Site and a one-parcel buffer was completed on April 2, 2025. Two buildings (350 and 370 West Trimble Road) from the Lumileds campus were found to be 45 years old. Within the one-parcel buffer, three resources were identified and evaluated: (1) PG&E transmission line on the Project Site, (2) Guadalupe River Channel Levee-Dyke Segments, and (3) Rincon de Los Esteros Reservoir and Pump Station (491 West Trimble Road).

Historical Evaluation

The three aforementioned structures were analyzed to determine if the resources were eligible for inclusion in the CRHR and the City of San José's Landmark Criteria. None of the resources have been previously listed under any local, State, or Federal historic resource designation criteria.

Per the Historical Resources Evaluation prepared for the Project, none of the resources are eligible for listing on the CRHR nor do the structures meet the City's criteria for a Candidate City Landmark. While the Guadalupe River Channel Levee-Dyke Segment would be eligible for listing on the CRHR under Criterion 1 (Association with Event) due to its history with the Flood Control and Governmental Trends and the Flood Control Act of 1941, the segment does not retain enough integrity to convey the channel's association with the Flood Control Act of 1941. The channel itself and the surrounding area have changed in a manner that impacts its ability to convey the midcentury history and design of originally used.⁴¹

Therefore, since the structures are not individually eligible for listing on the CRHR, are not eligible for listing in the San José Historic Resources Inventory as a Candidate City Landmark, and do not retain all seven aspects of integrity, none of the buildings are considered a historical resource under CEQA.

4.5.2 Impact Discussion

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

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

⁴¹ Ibid. Page 62.

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

4.5.2.1 *Project Impacts*

- a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
-

Pursuant to CEQA Guidelines Section 15064.5 (b)(1), a “substantial adverse change” in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

As described in Section 4.5.1.2 Existing Conditions, the Project Site does not contain historic resources or properties listed on federal, state, or local inventories. There are also no historical resources present within the surrounding area as the existing structures within the one-parcel buffer are not eligible for listing on the NRHP, CRHR, or the San José Historic Resources Inventory as a Candidate City Landmark. Furthermore, the Project Site is not located within a historic district and the proposed development would not detract from the historical significance of any nearby historic structures through incompatible land uses or design. The Intersection Improvement Area is located within existing public right of way. For these reasons, the Project would not cause a substantial adverse change in the significance of a historical resource. **(Less than Significant Impact)**

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

As described in Section 4.5.1.2 Existing Conditions, the project site has moderate to high sensitivity for archaeological resources (including Native American resources). The Project would require grading and subsurface work during construction, which increases the potential of encountering an unknown subsurface archaeological resource. Additionally, it is possible that construction activities within the Intersection Improvement Area, although entirely within existing roadways, could significantly impact archaeological resources, if encountered. In accordance with the recommendations of the site-specific archaeological resources report, the following PDM will be implemented by the Project to reduce impacts to subsurface archaeological resources.

PDM CUL-1.1: **Worker Environmental Awareness Program.** Prior to the commencement of construction, the Project Applicant shall secure the services of qualified archaeological and Native American monitors. These monitors shall prepare a workforce environmental awareness program (WEAP) to instruct construction workers of the obligation to protect and preserve valuable archaeological and Native American resources for review and approval by the City of San José’s Director of Planning, Building and Code Enforcement or the Director’s designee.

This programs hall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the specialists. The Project Applicant shall submit the qualifications of archaeological and Native American monitors, as well as an electronic copy of the WEAP to the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee.

PDM CUL-1.2: Construction Monitoring and Protection Measures. The Project Applicant shall secure the services of Native American and archaeological monitors to observe excavations of the native soils that underlie disturbed and fill dirt at the project site. The Native American monitor shall be selected based on the following:

- Traditional ties to the area being monitored.
- Knowledge of local Native American village sites.
- Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- Ability to travel to project sites within traditional tribal territory.
- Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5.
- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding of CEQA mitigation provisions.
- Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

The qualified archaeologist and Native American monitor shall have authority to halt construction activities temporarily in the immediate vicinity of an

unanticipated find. If, for any reasons, the qualified archaeologist or qualified Native American monitor are not present but construction crews encounter a cultural resource, then all work shall stop temporarily within 100 feet of the find until a qualified archaeologist in consultation with a qualified Native American monitor, have been contacted to determine the proper course of action. The City of San José's Director of Planning, Building and Code Enforcement or the Director's designee shall be notified of any finds during the grading or other construction activities.

PDM CUL-1.3: Undiscovered Archaeological Resources. If archaeological resources are encountered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee shall be notified, and a qualified archaeologist shall examine the find. The archaeological and Native American monitors shall evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it shall be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated in accordance with the recommendations of the archaeological and Native American monitors. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the City of San José's Director of Planning, Building and Code Enforcement or the Director's designee, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center prior to issuance of the certificate of occupancy.

The Project Applicant shall ensure that construction personnel do not collect or move any cultural material and shall ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.

With implementation of PDM CUL-1.1 through PDM CUL-1.3, impacts to unrecorded subsurface cultural resources would be less than significant. **(Less than Significant Impact)**

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

The project would involve substantial grading and subsurface work during construction, which could result in the discovery of previously unknown burials. Therefore, in the unlikely event that human remains are encountered, the proposed project would be required to comply with the following City of San José standard permit condition, which is implemented as a PDM.

PDM CUL-2: Stop Work for Human Remains. If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist shall recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the City of San José Director of Planning, Building and Code Enforcement or the Director's designee, the Northwest Information Center, and the MLD.

Through compliance with the PDM above, the proposed Project would properly handle findings of undiscovered human remains and this would reduce any impacts to a less than significant level.

(Less than Significant Impact)

4.5.2.2 *Cumulative Impacts*

-
- a) Would the project result in a cumulatively considerable contribution to a significant cumulative cultural resources impact?
-

The geographic area for cultural resources is the Project Site, the Intersection Improvement Area, and adjacent parcels as cultural resource impacts are typically localized and generally limited to the immediate area in which a given cultural resources is located. The cumulative projects may require excavation and grading or other activities that may affect unknown prehistoric cultural resources and/or historic resources. Other projects in the City of San José may also have cultural resources, irrespective of their designation as such on local, state, or federal registers. Any excavation or grading activities could affect these known and unknown cultural resources. Therefore, the City has

adopted standard conditions that will be implemented by all projects to reduce potential impacts to cultural resources. Project-level analyses will determine the necessity of additional mitigation measures to reduce localized and site-specific impacts to these resources.

Historic Resources

As discussed above, the Project Site is not classified as a historic resource nor is it eligible to be listed on the CRHR nor the NRHP. The Intersection Improvement Area is located within existing public right of way on paved streets and would only involve minor disturbance. For these reasons, the Project would not contribute to a significant cumulative impact on historic resources. **(Less than Significant Cumulative Impact)**

Archaeological Resources

The cumulative projects (including the proposed project) would be required to implement General Plan policies and the City of San José's standard permit conditions to reduce impacts to archaeological resources (if encountered) to a less than significant level. The project includes PDMs CUL-1 through CUL-2 to ensure the proposed development does not impact prehistoric or historic resources. As concluded in the General Plan Final Program EIR, future development under the General Plan, in conformance with existing policies and regulations, would not result in significant cumulative impacts to archaeological resources.⁴² **(Less than Significant Cumulative Impact)**

Human Remains

Build out of the General Plan, including the proposed project and cumulative projects, would be required to implement General Plan policy ER-10.2 to reduce impacts to human remains (if encountered) to a less than significant level (refer to PDM CUL-2). Therefore, the City has adopted standard conditions that will be implemented by all projects to ensure if human remains are discovered during earthwork activities then the remains would be handled properly and to limit disturbance. As concluded in the General Plan EIR, future development under the General Plan, in conformance with existing policies and regulations, would not result in significant cumulative impacts to human remains.⁴³ **(Less than Significant Cumulative Impact)**

⁴² City of San José. *Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan*. SCH# 2009072096. September 2011

⁴³ Ibid.

4.6 Energy

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 and Assembly Bill 1279

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279, also known as the California Climate Crisis Act, was approved on September 16, 2022, and codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan, identify and recommend measures to achieve these policy goals, and implement strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.⁴⁴ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.⁴⁵

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars II program in 2022 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2026 through 2035. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.⁴⁶

Regional and Local

Climate Smart San José

Climate Smart San José is a plan to reduce air pollution, save water, and create a stronger and healthier community. The City approved goals and milestones in February 2018 to ensure the City can substantially reduce GHG emissions through reaching the following goals and milestones:

- All new residential buildings will be Zero Net Carbon Emissions (ZNE) by 2020 and all new commercial buildings will be ZNE by 2030 (Note that ZNE buildings would be all electric with a carbon-free electricity source).
- One gigawatt of solar power will be installed in San Jose by 2040.

⁴⁴ California Building Standards Commission. "California Building Standards Code." Accessed May 21, 2024. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

⁴⁵ California Energy Commission (CEC). "2022 Building Energy Efficiency Standards." Accessed May 21, 2024. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

⁴⁶ California Air Resources Board. "Advanced Clean Cars II." Accessed May 21, 2024. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

- 61 percent of passenger vehicles will be powered by electricity by 2030.

City of San José Reach Building Code

In 2019, the San José City Council approved Ordinance No. 30311 and adopted the Reach Code Ordinance (Reach Code) to reduce energy related GHG emissions consistent with the goals of Climate Smart San José. The Reach Code applies to new construction projects in San José.

City of San José Municipal Code

The City's Municipal Code includes regulations associated with energy efficiency and energy use. City regulations include a Green Building Ordinance (Chapter 17.84) to foster practices to minimize the use and waste of energy, water and other resources in the City of San José, Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10), requirements for Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105), and a Construction and Demolition Division Deposit Program that fosters recycling of construction and demolition materials (Chapter 9.10).

Envision San José 2040 General Plan

The General Plan includes the following energy policies applicable to the proposed Project.

Policy	Description
MS-2.3	Utilize solar orientation, (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.
MS-2.11	Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).
MS-3.1	Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer installed residential development unless for recreation or other area functions.
MS-5.5	Maximize recycling and composting from all residents, businesses, and institutions in the City.
MS-6.5	Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.

4.6.1.2 Existing Conditions

Total energy usage in California was approximately 6,882 trillion British thermal units (Btu) in the year 2022, the most recent year for which this data was available.⁴⁷ Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 1,193 trillion Btu consumed by the commercial sector, 1,204 trillion Btu consumed by the residential sector, 1,539 trillion Btu consumed by the industrial sector, and 2,916 trillion Btu consumed by the transportation sector.⁴⁸ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

California's total system electric generation in 2022 was approximately 287,220 gigawatt hours (GWh), which was up 3.4 percent from the 2021 electric generation 277,764 GWh. In 2022, renewable/carbon free sources of energy were the largest source of California's power mix at 54.23 percent.⁴⁹ In 2022, a total of approximately 17,102 GWh of electricity was consumed in Santa Clara County with 4,250 GWh (25 percent) consumed by the residential sector 12,852 GWh (75 percent) consumed by the non-residential sector and.⁵⁰

San José Clean Energy (SJCE) is the electricity provider for residents and businesses in the City of San José. SJCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. SJCE customers are automatically enrolled in the GreenSource program, which provides 62 percent GHG emission-free electricity. Customers can choose to enroll in SJCE's TotalGreen program at any time to receive 100 percent GHG emission-free electricity from entirely renewable sources.⁵¹

Fuel for Motor Vehicles

Approximately 13,576 millions of gallons of gasoline and approximately 2,316 millions of gallons of diesel was consumed by vehicles in California in 2023. In Santa Clara County, approximately 563 millions of gallons of gasoline and approximately 45 millions of gallons of diesel was consumed by vehicles.⁵²

⁴⁷ United States Energy Information Administration. "California State Energy Profile." May 16, 2024. Accessed March 11, 2025. <https://www.eia.gov/state/print.php?sid=CA>.

⁴⁸ Ibid.

⁴⁹ California Energy Commission. "2022 Total System Electric Generation." Accessed March 11, 2025.

<https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>.

⁵⁰ California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed March 11, 2025. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

⁵¹ San José Clean Energy. "Your Choices." Accessed March 11, 2025. <https://sanjosecleanenergy.org/your-choices/#top>.

⁵² California Energy Commission. "2010-2023 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division." September 19, 2024. Accessed March 19, 2025. <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 27.1 mpg in 2023.⁵³ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in June 2024 to require all cars and light duty trucks achieve an overall industry average fuel economy of 50.4 mpg by model year 2031.⁵⁴

4.6.2 Impact Discussion

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

- a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
- c) Result in a substantial increase in demand upon energy resources in relation to projected supplies?

4.6.2.1 Project Impacts

-
- a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
-

Construction

Construction of the Project would require energy for the manufacturing and transportation of building materials, preparation of the Project Site as well as the Intersection Improvement Area (i.e., grading and excavation), and the construction of the buildings and related improvements. Construction energy usage is temporary and would not result in excessive energy consumption because construction processes are generally designed to be efficient to avoid excess monetary costs and it is reasonable to assume this would occur here. The Project would be constructed in an urbanized area with close access to roadways, construction supplies, and workers, making the Project more efficient than construction occurring in outlying, more isolated areas. Thus, the construction process is already efficient and opportunities for increasing energy efficiency during construction are limited.

⁵³ United States Environmental Protection Agency. "The 2024 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." November 2024. Accessed March 19, 2025. <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101CUU6.pdf>.

⁵⁴ United States Department of Transportation. "USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2027-2031." June 7, 2024. Accessed March 19, 2025. <https://www.transportation.gov/briefing-room/usdot-finalizes-new-fuel-economy-standards-model-years-2027-2031>.

During construction, the Project would be required to implement best management practices to reduce fugitive dust and exhaust emissions (refer to PDM AIR-1 in Section 4.3 Air Quality), which would, among other things, restrict unnecessary idling of construction equipment and require the applicant to post signs on the Project Site reminding workers to shut off idle equipment. These best management practices would reduce the potential for energy waste. Furthermore, pursuant with General Plan Policy MS-14.3 and MS-2.11, the Project would be required to implement the City's Green Building Policies to ensure that construction of the Project meets industry best practices and techniques are applied to maximize energy performance at the construction stage. The City's Zero Waste Strategic Plan would be implemented at a project level to enhance construction and demolition debris recycling, thus increasing diversion from landfills and further contributing to the energy efficiency of the Project's construction activities. For these reasons, construction of the Project would not result in wasteful or inefficient use of energy. **(Less than Significant Impact)**

Operation

Operation of the data center buildings and related infrastructure would consume energy for multiple purposes including, but not limited to, building cooling, lighting, appliances and electronics. Energy would also be consumed during each vehicle trip generated by employees and visitors. The Project would be required to be built in accordance with Title 24 and CALGreen and include green building measures to reduce energy consumption. Design features such as water efficient landscaping and ultra-low flow plumbing fixtures in the buildings would be implemented to limit water consumption to the extent feasible. Other than the proposed emergency backup generators, the Project would be designed to be 100 percent electric. In addition, the Project will pursue LEED and USGBC design requirements for data centers. Due to the energy efficiency measures incorporated into the Project, it would not result in a wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources.

Power Usage Effectiveness, or PUE, is a metric used to compare the efficiency of facilities that house computer servers. PUE is defined as the ratio of total facility energy use to Information Technology (IT) (i.e., server) power draw (e.g., $PUE = \text{Total Facility Source Energy} / \text{IT Source Energy}$). For example, a PUE of two (2), means that the data center or laboratory must draw two (2) watts of electricity for every one (1) watt of power consumed by the IT/server equipment. It is equal to the total energy consumption of a data center (for all fuels) divided by the energy consumption used for the IT equipment. The ideal PUE is one (1) where all power drawn by the facility goes to the IT infrastructure. Based on industry surveys, the 2023 average PUE for data centers is 1.58 with larger data center facilities being more efficient due to new technology.⁵⁵ The average annual PUE of the data centers proposed by the Project would be 1.2⁵⁶, and the peak PUE would be 1.5⁵⁷. Due to the

⁵⁵ Uptime Institute. "Large data centers are mostly more efficient, analysis confirms." February 7, 2024. Accessed March 35, 2025. <https://journal.uptimeinstitute.com/large-data-centers-are-mostly-more-efficient-analysis-confirms/>.

⁵⁶ The average annual PUE is calculated as follows: Total 80 MW building demand of average conditions divided by 64 MW Design Critical IT Load

⁵⁷ The Peak PUE is calculated as follows: Total 99 MW building demand power load on Worst Case Day divided by 64 MW total critical IT load

energy efficiency measures incorporated into the Project, it would not result in wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources.

Energy would be also consumed by the Project during regular testing and maintenance of the 42 emergency backup generators. Each generator would be limited to a maximum of 50 hours per year of operation for testing and maintenance purposes. Based on fuel consumption assumptions in the air quality analysis prepared for the Project (refer to Table 4.3-15), the emergency generator engines (Cat C175 and CAT 3512C) would use approximately 429,140 gallons (or 10,218 barrels⁵⁸) of fuel per year. Additionally, as described in PDM GHG-2 in Section 4.8 Greenhouse Gases, the Project would use renewable diesel fuel for the diesel-fired generators to the extent feasible to further reduce the Project's consumption on non-renewable resources. Therefore, the project's fuel usage for the emergency generators was compared to the supply and demand for renewable diesel fuel.

In 2023, it was estimated that approximately 61.9 million barrels of renewable diesel was produced in the United States.⁵⁹ An additional 8.6 million barrels was imported from other countries.⁶⁰ Therefore, the total available supply of renewable diesel in the United States in 2023 was 70.5 million barrels.

Approximately 68.4 million barrels was consumed in the United States in 2023, with California consuming approximately 62.5 million barrels.⁶¹ Over 91 percent of the renewable diesel fuel supplied in the United States in 2023 was used by California.

The United States Energy Information Administration forecasts that the supply of renewable diesel would increase to approximately 80.3 million barrels in 2025 and to approximately 91.3 million barrels in 2026.⁶² Consumption of renewable diesel fuel is predicted to be approximately 76.6 million barrels in 2025 and 91.3 million barrels in 2026.⁶³

Based on the forecasted consumption estimates, the project would increase the forecasted renewable diesel fuel consumption in 2025 and 2026 by approximately 0.01 percent.⁶⁴ This slight increase in demand for renewable diesel fuel from the Project would not be a substantial increase

⁵⁸ One barrel is equivalent to 42 gallons of fuel.

⁵⁹ United States Energy Information Administration. "Table 1. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2023." *Petroleum Supply Annual, Volume 1 with data for 2023*. August 2024.

⁶⁰ United States Energy Information Administration. "Table 1. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2023." *Petroleum Supply Annual, Volume 1 with data for 2023*. August 2024.

⁶¹ United States Energy Information Administration. "Table F30: Renewable Diesel Consumption Estimates, 2023." Release Date February 28, 2025. Accessed June 9, 2025. <https://www.eia.gov/state/seds/seds-data-fuel.php?sid=US#OtherRenewableEnergy>.

⁶² United States Energy Information Administration. "Table 4d. U.S. Biofuel Supply, Consumption, and Inventories." *Short-Term Energy Outlook*. May 2025.

⁶³ United States Energy Information Administration. "Table 4d. U.S. Biofuel Supply, Consumption, and Inventories." *Short-Term Energy Outlook*. May 2025.

⁶⁴ The Project's estimated fuel usage of 429,140 gallons of fuel per year was converted into million gallons by dividing by 1,000,000 (0.42914 million gallons) and then adding the converted value to forecasted fuel consumption million gallons value. $[(3,219.42914 \text{ million gallons per year} - 3,219 \text{ million gallons per year}) / (3,219 \text{ million gallons per year})] * 100 = 0.01 \text{ percent}$
 $[(3,833.42914 \text{ million gallons per year} - 3,833 \text{ million gallons per year}) / (3,833 \text{ million gallons per year})] * 100 = 0.01 \text{ percent}$

upon energy resources and there would be adequate renewable diesel supplies to serve the Project. Additionally, since the generators would only be operated when necessary for maintenance and testing, and would not be used regularly for electricity generation, the Project would not result in a wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources. For these reasons, the Project would not have a significant adverse effect on local or regional energy supplies for the above reasons and would not create a significant adverse impact on California's energy resources. **(Less than Significant Impact)**

- b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
-

Statewide energy efficiency and renewable energy goals are set forth in the California Renewables Portfolio Standard Program, which is one of California's key programs for advancing renewable energy. The CEC verifies the eligibility of renewable energy procured by all entities serving retail sales of electricity in California, as these entities are obligated to participate and report energy portfolios to the CEC to comply with the Renewables Portfolio Standard Program.⁶⁵ Electricity would be provided to the Project by SJCE or a similar provider (i.e., PG&E) from sources of renewable and carbon-free power including wind, solar, geothermal, and hydroelectric. SJCE and PG&E are subject to verification by the CEC as an electricity-providing entity. By sourcing electricity from SJCE or PG&E, the Project would be compliant with statewide energy goals as set forth in the California Renewables Portfolio Standard Program.

In addition, the proposed Project would be required to comply with various local policies and regulations adopted to improve energy efficiency in new developments and increase utilization of renewable energy sources, including the City's Green Building Program, Private Sector Green Building Policy, Greenhouse Gas Reduction Strategy, Climate Smart San José, Reach Code and General Plan energy policies. Implementation of applicable local policies and regulations would ensure the Project is compliant with regional and statewide energy efficiency and renewable energy plans and policies, such as the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan (General Plan Policy MS-14.3), the Model Water Efficient Landscape Ordinance (General Plan Policy MS-3.1), and CALGreen (City of San José Building Code). By adhering to adopted policies and regulations and sourcing electricity from SJCE or PG&E, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

⁶⁵ California Energy Commission. "Renewables Portfolio Standard – Verification and Compliance." Accessed March 25, 2025. <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard/renewables-portfolio-standard>

-
- c) Would the project result in a substantial increase in demand upon energy resources in relation to projected supplies?
-

The CEC provides new forecasts for electricity demand every two years as part of the Integrated Energy Policy Report process. According to the 2023 Integrated Energy Policy Report, which is the latest adopted integrated energy policy report, approximated statewide electricity consumption at approximately 288,000 GWh in 2022 with consumption to increase to nearly 376,000 GWh in 2040 (an approximately 30.6 percent total increase or 1.7 percent increase per year).⁶⁶ Demand forecasts for planning purposes use multiple scenarios, taking into account potential savings in different sectors, expected technological improvements, government mandates, and other factors.

The proposed Project would have a maximum electricity demand of approximately 852,348 MWh per year if the Project were to operate at maximum capacity at all times.⁶⁷ This is an extremely unlikely scenario, and the actual energy demand of the Project would be substantially lower. Even the maximum Project electricity demand load would comprise a fraction of the expected statewide electricity consumption. The diesel fuel use for the emergency generators is discussed above in checklist question a) and would also represent a fraction of the expected statewide renewable diesel fuel consumption. In addition, the proposed Project would be designed for energy efficiency and conservation in accordance with applicable provisions of the City's Green Building Program, Climate Smart San José goals and actions, and GHG Reduction Strategy. Therefore, the Project would not result in a substantial increase in demand upon energy resources relative to projected supplies.

4.6.2.2 *Cumulative Impacts*

-
- a) Would the project result in a cumulatively considerable contribution to a significant cumulative energy impact?
-

Cumulative energy impacts could occur as a result of the Project in combination with the other projects in the cumulative scenario. All cumulative projects would use energy during construction. However, it is reasonable to assume that the overall construction schedule and process for all cumulative projects would be designed to be efficient to comply with applicable local regulations and to avoid excess monetary costs. Additionally, all cumulative projects would include applicable air quality-related measures to lessen idling times of equipment and improve the efficiency during construction in accordance with a comprehensive regulatory framework. As a result, any construction-related cumulative energy impact due to wasteful use of energy resources would be less than significant.

⁶⁶ California Energy Commission. *Adopted 2023 Integrated Energy Policy Report with Errata*. February 14, 2024. Page 129. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report-iepr>.

⁶⁷ 97.3 MW * 8,760 hours per year = 852,348 MWh per year

The proposed Project in conjunction with other larger cumulative developments could result in cumulative energy impacts during occupation if energy were wasted. All cumulative projects would be required to be constructed consistent with the City's adopted Green Building Ordinance, which requires energy efficient design and use of fixtures to ensure buildings do not waste energy. Operation/occupation of all cumulative projects in the cumulative scenario would not result in a substantial increase in demand upon energy resources because their combined energy requirements would not exceed anticipated state, county, or local energy supplies. Thus, there would not be a significant cumulative energy impact. Moreover, the Project's contribution to this already less than significant cumulative energy impact would not be cumulatively considerable for the reasons detailed above. **(Less than Significant Cumulative Impact)**

4.7 Geology and Soils

The following discussion is based on a Geotechnical Investigation prepared by Langan Engineering and Environmental Services, Inc. dated January 20, 2023. A copy of the report is included as Appendix H of this SPPE Application.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Envision San José 2040 General Plan

The General Plan includes the following policies that are specific to geology and soils and applicable to the proposed Project.

Policy	Description
EC-3.1	Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.
EC-4.1	Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended
EC-4.2	Development in areas subject to soils and geologic hazards, including engineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjacent properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.
EC-4.4	Require all new development to conform to the City of San José's Geologic Hazard Ordinance.
EC-4.5	Ensure that any development activity that requires grading does not impact adjacent properties, local creeks, and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have a soil disturbance of one acre or more, adjacent to a creek/river, and/or are located in hillside areas.

Policy	Description
	Erosion Control Plans are also required for any new grading occurring between October 15 and April 15.
EC-4.11	Require the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards and require review and implementation of mitigation measures as part of the project approval process.
EC-4.12	Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of grading permits by the Director of Public Works.
ES-4.9	Permit development only in those areas where potential danger to health, safety, and welfare of the persons in that area can be mitigated to an acceptable level.

San José Municipal Code

Title 24 of the San José Municipal Code includes the most recent California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.04 (Building Code, Part 6 Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones, including State Seismic Hazard Zones for Liquefaction.

4.7.1.2 *Existing Conditions*

Regional Geology

The City of San José is located in the northern Santa Clara Valley, an alluvial basin underlain by sedimentary and metamorphic rocks of the Franciscan Complex. These alluvial deposits consist of unconsolidated to semi-consolidated sand, silt, clay, and gravel. The Santa Clara Valley is bounded by the Diablo Range to the east and the Santa Cruz Mountains to the west. The Valley was formed when sediments derived from both mountain ranges were exposed by tectonic uplift and regression of the inland sea which previously inundated this area.

On-Site Geologic Conditions

Topography and Soils

The Project Site (as well as the Intersection Improvement Area) are located in a relatively flat area with the ground surface elevations changing from approximately 25.5 feet to 28 feet with elevations at 33 feet in the southern part of the site.⁶⁸ Subgrade soils encountered in soil borings and cone penetration tests generally consisted of stiff to very stiff clay (within 7.5 to 10 feet of the

⁶⁸ Langan Engineering and Environmental Service, Inc. *Geotechnical Investigation Advanced Manufacturing Building*. January 20, 2023. Page 6.

existing ground surface) with a layer of silty sand and gravel. The clay portion of the soil has high expansion potential. The surface clay is underlain with soft to hard clay, sandy clay, clay with sand layers, and loose to very dense sand. This lower clay level has low expansion potential compared to the surface clay layer.⁶⁹

The Intersection Improvement Area is located within the public right-of-way along Orchard Parkway and Trimble Road and is underlain by soil and/or fill that has been compacted for construction of the existing roadways and installation of existing underground utility infrastructure.

Groundwater

Groundwater was encountered in soil borings at depths ranging from 10 to 15 feet below ground surface.⁷⁰ Groundwater levels at the Project Site (as well as the Intersection Improvement Area) may fluctuate with time due to seasonal conditions, rainfall, and irrigation practices.

Seismicity and Seismic Hazards

The Project Site (as well as the Intersection Improvement Area) is located within the seismically active San Francisco Bay region. The San Francisco Bay Area contains several faults that are capable of generating earthquakes of magnitude 7.0 or higher. The major active faults in the area are the San Andreas, San Gregorio, Hayward, and Calaveras faults. The closest faults to the Project Site are the Silver Creek fault (approximately 0.9 mile east of the Project Site), Hayward-Rodgers Creek Healdsburg fault (approximately 5.6 miles northeast of the Project Site), Calaveras fault (approximately 8.1 miles east of the Project Site), and Mission fault (approximately 8.1 miles northeast of the Project Site), Monte-Vista Shannon fault (approximately 8.7 miles southwest of the Project Site), and San Andreas fault (approximately 12.4 miles southwest of the Project Site).⁷¹

Neither the Project Site nor the Intersection Improvement Area are located within an Alquist-Priolo Earthquake Fault Zone.⁷² The Project Site and Intersection Improvement Area are also not located within a Santa Clara County Fault Rupture Hazard Zone for any of the faults.^{73,74}

Liquefaction

Liquefaction can be defined as ground failure or loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. This phenomenon is triggered by earthquakes or ground shaking that causes saturated or partially saturated soils to lose strength, potentially resulting in the

⁶⁹ Ibid.

⁷⁰ Ibid. Page 7.

⁷¹ Ibid. Page 8.

⁷² Ibid. Page 8

⁷³ California Geological Survey. "Earthquake Zones of Required Investigation." Accessed July 13, 2022. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.

⁷⁴ County of Santa Clara Department of Planning and Development. "Santa Clara County Geologic Hazard Zones." Zones: October 26, 2012. Accessed March 19, 2025. Page 11. https://stgenpln.blob.core.windows.net/document/GEO_GeohazardATLAS.pdf.

soil's inability to support structures. Liquefaction can result in adverse impacts to human and building safety and is typically addressed at the building design stage of a Project. The Project Site (which includes the Intersection Improvement Area) is located in a Liquefaction Hazard Zone as identified in maps prepared by the California Geological Survey. Additionally, based on soil boring laboratory results, the soils on-site are potentially liquefiable during a major earthquake.⁷⁵

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. The project-level Geotechnical Investigation concluded that the potential for lateral spreading on-site is low.⁷⁶

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Most of the City of San José is situated on alluvial fan deposits of Holocene age that have a low potential to contain significant nonrenewable paleontological resources; however, older Pleistocene sediments present at or near the ground surface at some locations have high potential to contain these resources. These older sediments, often found at depths of greater than 10 feet below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. Based on Figure 3.11-1 of the General Plan Final Program EIR, the Project Site (which includes the Intersection Improvement Area) is located in an area of high paleontological sensitivity at depth.⁷⁷

4.7.2 Impact Discussion

For the purpose of determining the significance of the project's impact on geology and soils, would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?
 - Strong seismic ground shaking?
 - Seismic-related ground failure, including liquefaction?
 - Landslides?

⁷⁵ Langan Engineering and Environmental Service, Inc. *Geotechnical Investigation Advanced Manufacturing Building*. January 20, 2023. Page 13 and Figure 5.

⁷⁶ Ibid. Page 14.

⁷⁷ City of San José. *Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan*. SCH# 2009072096. September 2011. Figure 3.11-1.

- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

4.7.2.1 *Project Impacts*

-
- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?
-

Fault Rupture

As described in Section 4.7.1.2 Existing Conditions, neither the Project Site nor the Intersection Improvement Area are located within an Alquist-Priolo Earthquake Fault Zone or a Santa Clara County Fault Rupture Hazard Zone, making fault rupture at the Project Site unlikely. While existing faults are located in the region, the Project would be outside of the fault zone for any regional fault systems, and significant impacts from fault ruptures are not anticipated to occur. **(Less than Significant Impact)**

Seismic Ground Shaking

The Project Site (as well as the Intersection Improvement Area) is located within the seismically active San Francisco Bay region. The faults in this region are capable of generating earthquakes of magnitude 7.0 or higher. During an earthquake, very strong ground shaking could occur at the Project Site.

Consistent with the City's General Plan and Municipal Code, to avoid and/or minimize potential damage from seismic shaking, the proposed Project would be required to be built using standard engineering and seismic safety design techniques. The following PDM, which is a Standard Permit Condition in the City of San José, shall be implemented to ensure the proposed Project is designed to address seismic hazards.

PDM GEO-1: Geologic Hazard Best Management Practices. The Project shall incorporate and implement the following City of San José Standard Permit Conditions related to geological hazards during construction:

- To avoid or minimize potential damage from seismic shaking, the Project shall be constructed using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of an approved geotechnical investigation. The report shall be reviewed and approved by the City of San José Department of Public Works as part of the building permit review and issuance process. The buildings shall meet the requirements of applicable Building and Fire Codes as adopted or updated by the City. The Project shall be designed to withstand soil hazards identified on the site and the Project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the Building Code.
- All excavation and grading work shall be scheduled in dry weather months or, in the alternative, construction sites shall be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting when not in use.
- Ditches shall be installed to divert runoff around excavations and graded areas if necessary.
- The Project shall be constructed in accordance with the standard engineering practices in the California Building Code, as adopted by the City of San José. These standard practices would ensure that the future buildings on the Project Site are designed to properly account for soils-related hazards on the Project Site.

With implementation of the PDM GEO-1, the proposed Project would not expose people or structures to substantial adverse effects due to ground shaking; nor would the Project exacerbate existing geological hazards on the Project Site such that it would impact (or worsen) off-site geological and soil conditions. **(Less than Significant Impact)**

Liquefaction and Lateral Spreading

As mentioned in Section 4.7.1.2 Existing Conditions, the Project Site (as well as the Intersection Improvement Area) is located within a Liquefaction Hazard Zone. According to the City's Municipal Code, a Certificate of Geologic Hazard Clearance is required prior to issuance of grading and/or development permits due to its location within a Geologic Hazard Zone. By subjecting the proposed Project to review by the City of San José's geologist and requiring geologic hazard clearance from

the Director of Public Works (pursuant with PDM GEO-1), hazards posed by seismically induced liquefaction would be reduced to less than significant. **(Less than Significant Impact)**

Lateral Spreading

As mentioned in Section 4.7.1.2 Existing Conditions, the Project Site has low probability for lateral spreading. In accordance with City policy and PDM GEO-1 discussed above, the proposed Project would be designed in accordance with a site-specific geotechnical investigation to reduce the risk of geologic hazards at the Project Site (as well as the Intersection Improvement Area, as relevant), including lateral spreading. By constructing the Project in accordance with standard engineering practices and the recommendations of the geotechnical investigation, the proposed Project would not result in a significant impact related to lateral spreading. **(Less than Significant Impact)**

Landslides

The Project Site (as well as the Intersection Improvement Area) is located in a relatively flat area. There are no hillsides or areas of differential elevation within the vicinity of the Project Site. The Project Site is also not mapped in a landslide hazard zone. As such, the proposed Project would not pose a risk to human or building safety due to earthquake-induced landslides. **(No Impact)**

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

Ground disturbance on the Project Site (as well as the Intersection Improvement Area) would occur during grading/excavation, trenching for utilities, and construction of the proposed buildings, parking structures and other proposed improvements and infrastructure. These activities could increase the exposure of affected soils to wind and water erosion. The City's NPDES Municipal Permit, urban runoff policies, and the Municipal Code are the primary means of enforcing erosion control measures through the grading and building permit process. General Plan Action EC-4.5 requires an Erosion Control Plan for private development projects that have a soil disturbance of one acre or more, are adjacent to a creek/river, and/or are located in hillside areas. The proposed Project would disturb approximately 28.5 acres, and the Project would be located adjacent to the Guadalupe River. Therefore, an Erosion Control Plan would be required to be prepared for the Project. Implementation of the City's Erosion Control Plan, in combination with PDM GEO-1, would reduce the Project's potential erosion impacts to a less than significant level. **(Less than Significant Impact)**

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The Project Site (as well as the Intersection Improvement Area) is located in a mapped liquefaction hazard zone. Neither the Project Site nor the Intersection Improvement Area are located within a

State or County landslide hazard zone. Impacts related to these geological hazards would be further reduced with implementation of the City's Standard Permit Conditions listed in PDM GEO-1 above, which requires future developments to be designed and constructed in accordance with applicable provisions of the recent California Building Code and a design-level geotechnical investigation. The design-level geotechnical investigation would identify site-specific ground failure hazards such as liquefaction and lateral spreading and appropriate techniques to minimize risks to people and structures. Development of the Project Site would not change or exacerbate the geologic conditions of the Project vicinity. Therefore, the Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The proposed Project would have a less than significant impact on the stability of the site geologic unit. **(Less than Significant Impact)**

- d) Would the project be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?
-

As described in Section 4.7.1.2 Existing Conditions, the Project Site (as well as the Intersection Improvement Area) is located on expansive soil. By adhering to the recommendations included in the geotechnical investigation for soil and seismic hazards and by implementing PDM GEO-1, the proposed Project would not result in a significant impact due to the underlying soils nor would it create substantial direct or indirect risks to life or property due to expansive soils. **(Less than Significant Impact)**

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

The proposed Project would dispose of wastewater via lateral connections to the City's sewer system and would not require the use of septic tanks or alternative wastewater disposal systems. **(No Impact)**

- f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?
-

As described in Section 4.7.1.2 Existing Conditions, the Project Site is sensitive for paleontological resources at depth. As mentioned in Section 3.3.9.4 Site Grading, Demolition, Excavation, and Construction, the excavation depth would typically be approximately four feet across the Project Site except for utilities and deep foundation systems construction. While there is no specific depth below the ground surface where paleontological resources would be found in areas with high sensitivity for paleontological resources at depth, the Project has the potential of discovering

paleontological resource due to the utilities and deep foundation systems work proposed. Therefore, the Project would be required to implement the following City Standard Permit Condition as PDM GEO-2.1 to reduce and avoid impacts to unidentified paleontological resources and PDM GEO-2.2 to educate construction workers to identify fossils.

PDM GEO-2.1: Worker Environmental Awareness Program for Paleontological Resources.

Prior to the start of construction, the Project Applicant shall secure the services of a qualified paleontologist specialist, as defined by the Society of Vertebrate Paleontology. The specialist shall prepare a Worker Environmental Awareness Program to instruct site workers of the obligation to protect and preserve valuable paleontological resources for review by the City's Planning Manager. This program shall be provided to all construction workers via a recorded presentation and shall include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project vicinity; instructions regarding the need to halt work in the vicinity of any potential paleontological resources encountered; and measures to notify their supervisor, the applicant, and the qualified paleontologist specialist.

Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers are halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.

PDM GEO-2.2: Stop Work for Paleontological Resources. If a fossil is encountered, the City shall be notified immediately and a qualified paleontologist shall be retained by the Project Applicant to examine the fossil, and if determined to be significant and avoidance is not feasible, Project construction shall be halted in the immediate area and the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. The excavation and salvage plan shall be provided to the City for approval prior to implementation. Construction work in the immediate area shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected shall be cleaned, repaired, sorted, and cataloged, along with copies of all pertinent field notes, photos, and maps.

With implementation PDM GEO-2.1 and GEO-2.2, the proposed Project would result in a less than significant impact to paleontological resources. **(Less than Significant Impact)**

4.7.2.2 Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a cumulatively significant geology and soils impact?

The geographic scope for this cumulative analysis is the Project Site, Intersection Improvement Area, and adjacent parcels. Cumulatively, all other cumulative projects in the general vicinity of the Project Site would trigger similar geology, soils, and seismicity impacts as the proposed Project. All cumulative projects are required to implement standard conditions of approval (similar to PDM GEO-1) as well as identified mitigation measures, and to ensure consistency with applicable provisions of the California Building Code to avoid significant impacts related to seismic, geologic, and soils hazards and/or reduce them to a less than significant level. Thus, there would not be a cumulative significant impact in this regard. Moreover, for the reasons described above, the Project's contribution to this already less than significant cumulative impact would not be cumulatively considerable.

Regarding paleontological resources, cumulative projects involving excavation at depth would result in similar impacts in connection with construction. However, adherence to the Standard Permit Condition listed in PDM GEO-2 for discovery of paleontological resources as well as other identified mitigation measures, and adherence to other applicable requirements and standards would ensure that there would not be a cumulative significant impact in this regard. Moreover, for the reasons described above, the Project's contribution to this already less than significant cumulative impact would not be cumulatively considerable. For these reasons, the cumulative projects, including the proposed Project, would not result in significant cumulative geologic and soils impacts. **(Less than Significant Cumulative Impact)**

4.8 Greenhouse Gas Emissions

The following discussion is based, in part, on information contained in the Air Quality Impact Assessment prepared for the Project by Atmospheric Dynamics, Inc. (attached to this SPPE Application as Appendix E) and a 2030 Greenhouse Gas Reduction Strategy Compliance Checklist completed by the Applicant (attached to this application as Appendix I).

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

4.8.1.2 *Background Information*

Greenhouse gases (GHG) are gases that trap heat in the atmosphere and regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities (anthropogenic). Natural and anthropogenic sources of GHGs are generally as follows:

- CO₂ exchange between the atmosphere, ocean, and land surface
- CO₂, CH₄, and N₂O are emitted from wildfires and volcanic eruptions
- CO₂ and N₂O are byproducts of fossil fuel combustion
- N₂O is associated with agricultural operations such as fertilization of crops
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty
- HFCs are now used as a substitute for CFCs in refrigeration and cooling
- PFCs and SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. Per the 2022 Scoping Plan from CARB, atmospheric concentrations of CO₂ have increased by 50 percent since the Industrial Revolution and continue to increase at a rate of two parts per million each year, which will result in

increased global temperatures.⁷⁸ The various climates within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.3 *Regulatory Framework*

State

Assembly Bill 32 and State Bill 32

Under the California Global Warming Solutions Act, known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources. The first Scoping Plan was approved by CARB in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to accelerate 2030 statewide target in terms of million metric tons of CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

2022 Scoping Plan

On December 15, 2022, CARB approved the 2022 Scoping Plan. The 2022 Scoping Plan provides a sector-by-sector guide on how to reduce man-made (i.e., anthropogenic) GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 over a 25-year horizon.⁷⁹ The primary focus of the 2022 Scoping Plan is to reduce the usage of fossil fuels by electricizing the transportation sector, procuring electricity from renewable resources, phasing out natural gas in land use developments, and building transit-oriented communities that encourage multi-modal transportation. If implemented successfully, the 2022 Scoping Plan would not only reduce GHG emissions but also reduce smog-forming air pollution (NO_x) by 71 percent and reduce fossil fuel demand by 94 percent. The 2022 Scoping Plan also details natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of

⁷⁸ CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 3.

⁷⁹ CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 5.

anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

Senate Bill 375 and Plan Bay Area 2050

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), the Air District, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as 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.⁸⁰

Plan Bay Area 2050 includes a goal to increase the number of households that live within 0.5 mile of frequent transit by 2050. Plan Bay Area 2050 promotes strategies that support active and shared modes, combined with a transit-supportive land use patterns, which together are forecasted to lower the share of Bay Area residents that drive to work alone from 50 percent in 2015 to 33 percent in 2050, resulting in a decrease in GHG emissions. Plan Bay Area 2050 also provides a path to emissions reductions via goals to expand TDM initiatives that support and augment employers' commute programs.

SB 100

SB 100, known as The 100 Percent Clean Energy Act of 2018, was adopted on September 10, 2018. The overall goal is to have all retail electricity sold in California be procured from 100 percent renewable and zero-carbon resources by the year 2045. SB 100 also modified the renewables portfolio standard to 50 percent by 2025 and 60 percent by 2030.

⁸⁰ Association of Bay Area Governments and Metropolitan Transportation Commission. Plan Bay Area 2050. October 21, 2021. Page 20.

Executive Order B-55-18 and Assembly Bill 1279

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279, also known as the California Climate Crisis Act, was approved on September 16, 2022 and codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and implement strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

Advanced Clean Cars II Regulation

To continue reducing air pollutants and GHG emissions in the transportation sector, CARB adopted the Advanced Clean Cars II Regulations (Resolution 22-12) on August 25, 2022. The new regulation requires that by 2035 all new passenger cars, trucks, and SUVs sold in California will be zero-emission vehicles. This regulation bans the sale of new gasoline or diesel passenger cars, trucks, and SUVs in California from automakers. Beginning in 2026, 35 percent of new vehicle sales must be zero-emission vehicles and plug-in hybrid electric vehicles (EV) and that percentage will increase per year. By 2030, 70 percent of new vehicle sales will be zero-emissions vehicles and by the 2035 model year 100 percent of new vehicle sales will be zero-emissions. CARB will limit the use of plug-in hybrid EVs in the percentage requirements to keep the manufacturing of zero-emissions as the primary goal. Existing gasoline cars can continue to be driven and sold as used cars beyond 2035. CARB is required to track and report on the zero-emissions vehicle market development annually.

California Building Standards Code – Title 24 Part 11 and Part 6

The CALGreen Code is part of the California Building Standards Code under Title 24, Part 11.⁸¹ The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 CALGreen Code) was effective as of January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy

⁸¹ Refer to <https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#:~:text=CALGreen%20is%20the%20first%2Din,to%201990%20levels%20by%202020.>

Code as of January 1, 2023. There are new 2022 standards for single-family residences, multi-family residences, and non-residential uses.^{82,83,84} Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments.

Requirements for EV charging infrastructure are set forth in Title 24 of the California Code of Regulations and are regularly updated on a three-year cycle. The CALGreen standards consist of a set of mandatory standards required for new development, as well as two more voluntary standards known as Tier 1 and Tier 2. The 2022 CALGreen standards require deployment of additional EV chargers in various building types, including multi-family residential, hotel, and non-residential land uses. They include requirements for both EV capable parking spaces and the installation of EV supply equipment for multi-family residential and nonresidential buildings. The 2022 CALGreen standards also include requirements for both EV readiness and the actual installation of EV chargers.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated. CALGreen also allows a disposal reduction option that can be met when the project's disposal rate is 2.0 pounds per square foot or less for non-residential and high-rise residential construction or 3.4 pounds per square foot or less for low-rise residential construction.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 Clean Air Plan prepared by the Air District includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Bay Area Air District CEQA Thresholds for Evaluating Climate Impacts from Land Use Projects and Plans

In April 2022, the Air District Board of Directors adopted the Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. The report includes the Air District's thresholds of significance for use in determining whether a proposed

⁸² California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed May 22, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.

⁸³ California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed May 22, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.

⁸⁴ California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed May 22, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

project or plan will have a significant impact on climate change and provides substantial evidence to support these thresholds. The April 2022 GHG thresholds, as shown in Section 4.8.2.1 below, replace the GHG thresholds set forth in the May 2017 Air District CEQA Air Quality Guidelines and represent what is required of new land use development projects and plans to achieve California's long-term climate goal of carbon neutrality by 2045.

Envision San José 2040 General Plan

The General Plan includes the following GHG policies applicable to the proposed Project.

Policy	Description
MS-2.11	Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).
MS-14.4	Implement the City's Green Building Policies so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy system, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

City of San José Reach Building Code

In 2019, the San José City Council approved Ordinance No. 30311 and adopted Reach Code Ordinances (Reach Code) to reduce energy related GHG emissions consistent with the goals of Climate Smart San José. The Reach Codes apply to new construction projects in San José.

Climate Smart San José

Climate Smart San José is a plan to reduce air pollution, save water, and create a stronger and healthier community. The City approved goals and milestones in February 2018 to ensure the City can substantially reduce GHG emissions through reaching the following goals and milestones:

- All new residential buildings will be Zero Net Carbon Emissions (ZNE) by 2020 and all new commercial buildings will be ZNE by 2030 (Note that ZNE buildings would be all electric with a carbon-free electricity source)
- One gigawatt of solar power will be installed in San José by 2040
- 61 percent of passenger vehicles will be powered by electricity by 2030

The 2030 Greenhouse Gas Reduction Strategy (GHGRS) is the latest update to the City's GHGRS and is designed to meet statewide GHG reduction targets for 2030 set by SB 32. As a qualified Climate Action Plan, the 2030 GHGRS allows for tiering and streamlining of GHG analyses under CEQA. The GHGRS identifies General Plan policies and strategies to be implemented by development projects in the areas of green building/energy use, multi-modal transportation, water conservation, and solid waste reduction. Projects that are consistent with the land use designation that covers the site they are located on, and comply with the policies and strategies outlined in the 2030 GHGRS, would have less than significant GHG impacts under CEQA.

4.8.1.4 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns. The current Project Site does not actively emit GHG emissions since it is unoccupied. The vehicles that utilize the existing parking lot are associated with the existing Lumileds campus.

4.8.2 Impact Discussion

For the purpose of determining the significance of the project's impact on greenhouse gas emissions, would the project:

- a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

4.8.2.1 *Thresholds of Significance*

Pursuant with the latest Air District guidelines, for land use projects to result in a less than significant GHG emissions impact, the land use project would need to comply with either threshold A or B below.

- A. Projects must include, at a minimum, the following project design elements:
 - 1. Buildings
 - a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
 - b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
 - 2. Transportation
 - a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
 - i. Residential projects: 15 percent below the existing VMT per capita
 - ii. Office projects: 15 percent below the existing VMT per employee
 - iii. Retail projects: no net increase in existing VMT
 - b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b)

This Project is consistent with the City's General Plan land use designations for the Project Site, therefore; the City's local GHGRS can be used. The City of San José's 2030 GHGRS is a qualified GHGRS that meets the criteria under State CEQA Guidelines Section 15183.5(b). Threshold B is applicable to the Project.

In addition, the Air District has adopted a numeric threshold of 10,000 metric tons of CO₂e per year (MT CO₂e/year) for projects that require permits from the Air District. Given that the Project would include standby generators requiring Air District permits to operate, the significance threshold applicable to stationary source emissions from the Project is 10,000 MT CO₂e/year. This Air District threshold is consistent with stationary source thresholds adopted by other air quality management districts throughout the state.

-
- a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
-

Construction Emissions

As shown in the emissions calculations in Table 4.3-7 in Section 4.3 Air Quality, the Project's total GHG emissions from construction activities would be approximately 2,583 metric tons CO₂e/year. Since construction emissions would cease once construction is complete, they are considered temporary emissions. Neither the Commission, City of San José, nor the Air District have an adopted threshold of significance for construction-related GHG emissions. Based on the temporary nature of construction GHG emissions, the Project would not interfere with the implementation of SB 32, and the impact is considered less than significant. **(Less Than Significant Impact)**

Stationary Source Emissions

As shown in the emissions calculations in Table 4.3-8 in Section 4.3 Air Quality, the Project's maximum annual GHG emissions from maintenance and readiness testing of the backup generators would be approximately 4,346 metric tons CO₂e per year. This is below the Air District's threshold of 10,000 metric tons CO₂e per year for stationary sources and is, therefore, less than significant. **(Less Than Significant Impact)**

Operational Emissions

Consistency with City of San José GHGRS

As discussed in Section 4.8.1.2, Regulatory Framework, projects that comply with the policies and strategies outlined in the City's 2030 GHGRS would have a less than significant GHG impact and are assumed to have less than significant (direct or indirect) GHG emissions. The City has developed a consistency checklist to determine if a project is consistent with the 2030 GHGRS, which would show compliance with the State's goal of reducing statewide GHG emissions 40 percent below 1990 level by 2030 (SB 32). Compliance with these mandatory policies and strategies by the Project ensures consistency with the 2030 GHGRS.

As documented in Appendix I, the Project would be consistent with the mandatory policies and strategies of the 2030 GHGRS. Therefore, since the Project would be consistent with 2030 GHGRS, GHG emissions generated by the Project would not conflict with SB 32. The Project includes the following PDM to ensure consistency with the City's GHGRS. This PDM is consistent with measures approved by the City of San Jose and the CEC in recent data center projects.

PDM GHG-1: Carbon-Free Energy. The Project Owner shall participate in the SJCE at the TotalGreen level (i.e., 100% carbon-free electricity) for electricity accounts

associated with the Project or participate in a clean energy program that accomplishes the same goals of 100 percent carbon-free electricity as the SJCE TotalGreen Level.

During operation, the Project Owner shall provide documentation to the Director or Director's designee with the City of San José Planning, Building and Code Enforcement of initial enrollment and shall submit annual reports to the Director or Director's designee with the City of San José Department of Planning, Building and Code Enforcement documenting either continued participation in SJCE at the TotalGreen level or documentation that alternative measures continue to provide 100 percent carbon-free electricity, as verified by an independent third-party auditor specializing in greenhouse gas emissions.

While not required by any law, regulation, the 2030 GHGRS, or requirement to mitigate any significant project impact, the Project also includes the following PDM as a voluntary commitment to the use of renewable diesel as its primary fuel source for the backup generating facilities.

PDM GHG-2: Use of Renewable Fuel. The Project Owner shall use renewable diesel fuel for the diesel-fired generators to the extent feasible. During an emergency where renewable diesel fuel supplies may be limited, the Project Owner shall document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The project owner shall submit annual reports demonstrating the use of renewable resources for 100 percent of total energy use by the generators following project commencement.

Based on the above analysis, the Project's operational GHG emissions would be consistent with the Air District's GHG Threshold B, which would ensure consistency with the SB 32 and carbon neutral goals set by the State. Therefore, the proposed Project would result in a less than significant GHG impact during construction and operations of the proposed Project. **(Less than Significant Impact)**

Quantified Operational Emissions

As described previously, the significance of the Project's operational GHG emissions is determined by the Project's consistency with the City's 2030 GHGRS, which is discussed above. However, it is our understanding that the CEC prefers SPPE Applications to quantify a project's GHG emissions. The Project's operational emissions are quantified in Table 4.8-1, below, and are included for informational purposes only.

Table 4.8-1: Project Operational GHG Emissions

Source	Annual Emissions (Metric Tons of CO₂e)
Miscellaneous Operations (Area, Energy, Mobile, Waste, and Water)	1,230
Emergency Engines (Maintenance and Readiness Testing Only)	4,346
Refrigerant Leakage Emissions	11
SF ₆ Breaker Emissions	35
99 MW of Energy Use ¹	0
Total	5,622

Notes: ¹ The Project would not result in any GHG emissions from electricity consumption with implementation of PDM GHG-1, which requires the Project to utilize 100% carbon-free electricity. Without PDM GHG-1, based on PG&E Carbon Intensity Factor of 204 pounds CO₂/MW-hour and assuming 8,760 hours per year of energy use, the indirect emissions from energy consumption would be approximately 80,640 Metric Tons CO₂e. Refer to Section 4.3 Air Quality in this SPPE Application.

- a) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

CARB 2022 Scoping Plan

As described in Section 4.8.1.2 Regulatory Framework, the 2022 Scoping Plan is a document that plans how the State will achieve carbon neutrality by 2045 and reduce anthropogenic emissions to 85 percent below 1990 levels by 2045. The latest Air District GHG qualitative thresholds were designed to ensure future projects complete their “fair share” of implementing carbon reduction design features to help achieve the State’s carbon neutrality goal. A project that can either meet the energy and transportation design elements under Threshold A or is consistent with a qualified GHG reduction strategy under Threshold B is then consistent with the goals outlined in the 2022 Scoping Plan and would not hinder the State from achieving carbon neutrality. As described under checklist question a), the Project would be consistent the City’s qualified 2030 GHGRS compliance checklist. Therefore, the proposed Project’s contribution would not be cumulatively considerable as it does not impede California’s ability to achieve carbon neutrality.

California Senate Bill 100

SB 100 advances the RPS renewable resources requirement to 50 percent by 2026 and 60 percent by 2030. It also requires renewable energy resources and zero-carbon resources to supply 100 percent of all retail sales of electricity by 2045. The Project’s GHG emissions are predominantly from electricity usage. Since all electricity supplied to the Project by SJCE or PG&E would be subject to the RPS requirements promulgated under SB 100, the Project would not conflict with plans, policies, or regulations adopted pursuant to SB 100.

Bay Area 2017 Clean Air Plan

The Bay Area 2017 Clean Air Plan includes performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce GHG emissions to 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Due to the relatively high electrical demand of the Project, energy efficiency measures are included in the design and operation of the on-site electrical and mechanical systems. Additionally, as described above, the Project would participate in a clean energy program that accomplishes 100 percent carbon-free electricity for the Project. This would be consistent with the general purpose of Energy and Climate Measure (ECM)-1 – Energy Efficiency in the 2017 Bay Area Clean Air Plan.

City of San José GHGRS

The Project applicant would be required to apply for building permits for the Project from the City of San José. For commercial or industrial projects subject to development review by the City of San José, the City's 2030 GHGRS presents the City's comprehensive path to reduce GHG emissions to achieve the SB 32 2030 reduction target of reducing statewide GHG emissions 40 percent below the 1990 level by 2030. Additionally, the 2030 GHGRS leverages other important City plans and policies, including the General Plan, Climate Smart San José, and the City Municipal Code in identifying reductions strategies that achieve the City's target.

The Project applicant would be required to incorporate measures from the GHGRS into the Project, as specified by the City during the design review process to ensure compliance with applicable laws, ordinances, regulations, and standards. Conformance with the applicable design codes and policies would be enforced during the City design review process. As discussed above, the Project would be consistent with the 2030 GHGRS (refer to Appendix I).

City of San José General Plan, Climate Smart San José, and Green Building Ordinance

The Project would be consistent with the City's General Plan policies, Climate Smart San José, and Green Building Ordinance, which are all local regulations that aim to improve sustainable design and reduce GHG emissions. As required by the State and the City, the Project would be constructed in compliance with the current CALGreen Building Standards Code (Title 24, Part 11) to increase energy and water efficiency standards in new developments. The CALGreen Building Standards requires efficient windows, insulation, lighting, ventilation systems, and other features that reduce water and energy consumption. Also as mentioned previously, the Project would source carbon-free electricity for the data center buildings and no natural gas infrastructure would be included in the Project, which would reduce energy-related GHG emissions. There would also be electric vehicle parking spaces and charging infrastructure to support the transition to electric vehicles, which would reduce reliance on gasoline fueled vehicles. Pursuant to the City's Green Building requirements, the Project would also be required to demonstrate and achieve (at a minimum) the USGBC Silver level certification, which would reduce water and energy.⁸⁵ As a design feature, the

⁸⁵ Refer to San José Municipal Code Chapter 17.84 Green Building Regulations for Private Development.

Project is pursuing implementation of LEED and USGBC design and construction methodologies. Therefore, the Project would be designed in a manner that requires more efficient energy and water use and supports electric vehicle infrastructure. The Project would be consistent Climate Smart San José and Green Building Ordinance along with complying with the City's General Plan policies related to GHG emissions reduction.

Conclusion

With implementation of the efficiency measures to be incorporated into the Project and the implementation of PDM GHG-1 and PDM GHG-2, GHG emissions related to the Project would be consistent with applicable plans and policies adopted to reduce GHG emissions and would be required to comply with all regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. For these reasons, the Project would not conflict with an applicable plan, policy or regulation for GHG reductions. **(Less than Significant Impact)**

4.8.2.3 *Cumulative Impacts*

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

As discussed above, GHG emissions worldwide contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and foreseeable future projects in San José, the entire state of California, and across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts. The above analysis of the Project's GHG emissions impacts is, therefore, also necessarily an analysis of the Project's contribution to cumulative GHG emissions impacts. **(Less than Significant Cumulative Impact)**

4.9 Hazards and Hazardous Materials

The following discussion is based on a Phase I Environmental Site Assessment (ESA) prepared by Partner Engineering and Science, Inc. dated September 17, 2024. A copy of the report is included as Appendix J of 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, 1986.⁸⁶

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

⁸⁶ United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 22, 2024. <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.⁸⁷

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).⁸⁸

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 Santa Clara 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.⁸⁹ The EPA is currently considering a proposed ban on on-going use of

⁸⁷ United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 22, 2024. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

⁸⁸ California Environmental Protection Agency. "Cortese List Data Resources." Accessed May 22, 2024. <https://calepa.ca.gov/sitecleanup/corteselist/>.

⁸⁹ United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed May 22, 2024. <https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos>

asbestos.⁹⁰ 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. 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.

Envision San José 2040 General Plan

The General Plan includes the following hazards and hazardous materials policies applicable to the proposed Project.

⁹⁰Ibid.

Policy	Description
EC-7.1	For development and redevelopment projects, require evaluation of the proposed site's historical and present use to determine if any potential environmental conditions exist that could adversely impact the community or environment.
EC-7.2	Identify existing soil, soil vapor, groundwater, and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and ground water contamination shall be designed to avoid adverse human health and environmental risk, in conformance with regional, state, and federal laws, regulations, guidelines and standards.
EC-7.5	In development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and State requirements.
EC-7.9	Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with contaminated soils and/or groundwater or where historical or active regulatory oversight exists.
EC-7.10	Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation of dispersion of dust and sediment runoff.
EC-7.11	Require sampling for residual agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety during construction. Mitigation to meet appropriate end use such as residential or commercial/industrial shall be provided.
TR-14.2	Regulate development in the vicinity of airports in accordance with Federal Aviation Administration regulations to maintain the airspace required for the safe operation of these facilities and avoid potential hazards navigation.

City of San José Emergency Operations Plan

The latest City of San José Emergency Operations Plan (EOP) was adopted in May 2024. The EOP identifies emergency response policies, describes the response and recovery organization, and assigns specific roles and responsibilities to City departments, agencies, and community partners in a way that allows the EOP to be used for all emergencies that could occur within the City.

4.9.1.2 *Existing Conditions*

Site History

The Project Site consists primarily of surface parking lots, with the exception of an undeveloped graded area where DC North would be constructed. The existing Lumileds campus is situated

between the boundaries of where DC North and DC West are proposed. Prior to the existing industrial development on-site, the Project Site was undeveloped until it was used for agricultural purposes from about 1939 to 1974. The project site was acquired by Hewlett-Packard in 1976, who then developed the site with the existing buildings and surface parking lots between 1978 to 1982. The existing buildings were operated by Hewlett-Packard until around 2008 when new technology and industrial tenants (e.g., Avago Tech Wireless USA MFG Inc., Avago Technologies Inc., Agilent Technologies Inc., Hewlett Packard Co., Lumileds Lighting LLC, Philips Lumileds Lighting Company) occupied 350 West Trimble and 370 West Trimble Road. From 2009, Lumileds, which changed its name to Philips Lumileds Lighting Company, has been the sole occupant of the existing industrial campus.⁹¹

The Intersection Improvement Area is located within the existing public right-of-way of West Trimble Road and Orchard Parkway. West Trimble Road was established by 1968, while Orchard Parkway was constructed by 2003.

On-Site Sources of Contamination

In 2000, a diesel fuel release occurred due to damaged piping associated with a 12,000-gallon underground storage tank (UST). The release occurred adjacent to Service Building 89, which is located in an area of the Lumileds campus between the proposed DC North and DC West buildings. Soil and groundwater impacts from the release were investigated in September and October 2000, and subsequent groundwater extraction removed approximately 5,500 gallons of diesel impacted groundwater. In August 2003, the RWQCB issued a Case Closed status for the release incident after concluding that the diesel fuel contamination appeared localized in the vicinity of the release and that concentrations of residual petroleum appeared to be stable.

Soil and groundwater sampling were most recently completed for the Project Site and the adjacent Lumileds Campus in October 2014 in the diesel UST area, solvent unloading area, wastewater treatment and other process areas, surficial soil, and perimeter groundwater. A total of 39 soil samples and 20 groundwater samples were submitted for analyses. Sampling in the diesel UST area indicated that concentrations of petroleum hydrocarbons had not increased since the RWQCB issued a Case Closed status for this area. Samples taken in the process areas, wastewater treatment area, and solvent unloading area found contaminants such as heavy metals and arsenic but below RWQCB Environmental Screening Levels (ESLs) and background concentrations for the area. The surficial soil samples and perimeter groundwater samples did not find any volatile organic compounds (VOCs) or semivolatile organic compounds (SVOCs); heavy metals were detected at concentrations above regulatory screening levels but below levels for groundwater not used as a drinking water source. Notably, arsenic was identified in 15 of 18 subsurface soil samples at an average and maximum concentration of 5.58 mg/kg and 22 mg/kg, respectively. These concentrations appeared to be consistent with background concentrations identified in prior regional studies.

⁹¹ Partner Engineering and Science, Inc. *Phase I Environmental Site Assessment Report*. September 17, 2024. Page 12.

Regulatory Database Listings

The Project Site is listed on a number of regulatory databases, including the California Hazardous Material Incident Reporting System (CHMIRS), Leaking Underground Storage Tank (LUST), Hazardous Waste Information System (HAZNET), and Envirostor. The listings are indicative of the industrial use of the Project Site. Based on the regulatory status of the listings, these listings do not represent any significant environmental concerns.

Phase I ESAs completed for the Project Site did not identify any recognized environmental conditions (REC)⁹² or controlled recognized environmental conditions (CREC)⁹³ for the site. One historical recognized environmental condition (HREC)⁹⁴ was identified for the site. The HREC on-site is related to the prior diesel fuel release discussed above.

Off-Site Sources of Contamination

A review of databases and files from federal, state, and local environmental regulatory agencies was used to identify use, generation, storage, treatment, or disposal of hazardous substances and chemicals, or release incidents of such materials at surrounding facilities that may have impacted the subject site. Based on distance, regulatory status, and/or apparent groundwater gradient, Partner Engineering and Science, Inc. determined no off-site or adjoining properties would have created an environmental concern to the Project Site.⁹⁵

Airport Operations

The San José Mineta International Airport is located approximately 1,400 feet southwest of the Project Site. As previously mentioned, FAR Part 77 requires that the 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 ground. For the Project Site, any structure exceeding 40 feet in height above grade would require submittal to the FAA for airspace safety review.

⁹² A REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property; due to release the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

⁹³ A CREC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

⁹⁴ A HREC refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

⁹⁵ Partner Engineering and Science, Inc. *Phase I Environmental Site Assessment Report*. September 17, 2024. Pages 22 and 23.

Fire Hazard Zone

The Project Site is not in a very high, high, or moderate fire hazard severity zone.⁹⁶

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:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

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?
-

Operation of the Project 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 in the equipment yards. 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.

⁹⁶ California Department of Forestry and Fire Protection. "City of San José – Santa Clara County Local Responsibility Area Fire Hazard Severity Zones." February 24, 2025. Accessed March 26, 2025.
<https://calfire.app.box.com/s/wahuw9ny7cgn89xpxh7092ur50r1pwvj/file/1785859821009>.

As described in Section 3.2.10 Hazardous Materials Management, each generator unit and its integrated fuel tanks have been designed with double walls. The interstitial space between the walls of each tank is continuously monitored electronically for the existence of liquids. Additionally, the standby generator units will be housed within a self-sheltering enclosure that prevents the intrusion of storm water.

Diesel fuel will be delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of approximately 17,500 gallons. To refuel the DC West generators, the tanker truck parks on the access road to the east of the DC West generator yard and extends the fuel fill hose through one of multiple hinged openings in the screen wall surrounding the generator equipment yard or via a centralized fueling station located on the exterior of the precast screen wall. To refuel the DC North generators, the tanker truck parks on the access road to the South of the DC North generator yard and follows the same process of extending the fuel fill hose through one of multiple hinged openings.

There will be no loading/unloading racks or containment for re-fueling events; however, a spill catch sump is located at the low spots within each fill port for the fuel tank. To prevent a release from entering the storm drain system, storm drains will be temporarily blocked off by the truck driver and/or facility staff during fueling events. Rubber pads or similar devices will be kept in the generation yard to allow quick blockage of the storm sewer drains during fueling events.

To further minimize the potential for diesel fuel to come into contact with stormwater, to the extent feasible, fueling operations will be scheduled at times when storm events are improbable. Additionally, the emergency generators yards for DC North and DC West would be located out of the NSJFMP floodplain area as shown in Sheet Index C 4.0 in Appendix A. Therefore, no fueling activities would occur in areas designated to convey floodwaters through the site. Furthermore, 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 Spill Prevention, Control, and Countermeasure Plan. The spill prevention measures described above would be required to be incorporated into the Plan. 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.

Warning signs and/or wheel chocks will 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 will be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures will be posted at the loading and unloading areas. DEF is used as part of the diesel engine combustion process to treat the exhaust gas and meet the emissions requirements. Each enclosure will have an approximately 100-gallon DEF tank. The tank can be filled in place from drums, totes or bulk tanker truck similar to the process identified for the diesel refuel process.

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?
-

As described in Section 4.9.1.2 Existing Conditions, there are no RECs or CRECs associated with the site. The spillage of diesel fuel in the 2000s is considered a HREC. However, due to the agricultural history of the Project Site, residual organochlorine pesticides and/or pesticide-based metals (such as arsenic and lead) may be present in subsurface soil that could adversely affect construction workers, adjacent properties, and future site workers if disturbed. Phase I ESAs completed for the Project Site determined that additional sampling for arsenic, metals, and organochlorine pesticides may be warranted for soil management prior to redevelopment. The following measures are included in the Project as PDMs to reduce hazardous materials impacts to a less than significant level.

PDM HAZ-1.1: Soil testing shall be performed to determine if a Site Management Plan (SMP) shall be prepared. If soil testing identifies contaminants in areas of the Project Site to be disturbed that exceed both published naturally occurring background levels and applicable environmental screening levels (ESL) for the protection of future commercial/industrial workers published by the San Francisco Bay Regional Water Quality Control Board (RWQCB), the Project applicant shall be required to prepare and submit a SMP.

Components of the SMP (if required) shall include, but shall not be limited to:

- A detailed discussion of the site background;
- A description of either capping soils or removal and hauling soils off-site to a licensed non-hazardous or hazardous materials disposal site based on environmental testing of the soil.
- Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
- Development of cleanup levels as based on Section 4.25.2.3 of the RWQCB's The Water Quality Control Plan for the San Francisco Bay Basin (March 2023, Basin Plan);
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off- site waste disposal facility;
- Soil stockpiling protocols; and
- Protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities.

The SMP shall be submitted to the RWQCB, Santa Clara County Environmental Health Department, California Department of Toxic Substances Control, or equivalent regulatory agency for review and/or approval (if required). Copies of the approved SMP shall be provided to the Director of Planning, Building, and Code Enforcement or the Director's designee and the Environmental Compliance Officer in the City of San José Environmental Services Department prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest).

PDM HAZ-1.2: Prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest), 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 submitted to the Director of Planning, Building and Code Enforcement, or their designee, and the Environmental Compliance Officer in the City of San José Environmental Services Department 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
- Provisions for the onsite management and/or treatment of contaminated groundwater during extraction or dewatering activities; and
- A description of emergency procedures and identification of responsible personnel to contact in event of an emergency. Include contact information for responsible personnel and other emergency contact numbers.

Copies of the approved HSPs shall be kept at the Project Site.

With implementation of PDM HAZ-1.1 and PDM HAZ-1.2 described above, the proposed Project would result in a less than significant impact due to potentially contaminated soil and groundwater on-site as contamination would be addressed via a SMP and HSP. **(Less than Significant Impact)**

Project 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 Spill Prevention, Control, and Countermeasure Plan 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. **(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 Montague Elementary School, approximately 0.7-mile northwest of the site. Therefore, the Project would not emit hazardous emissions or handle hazardous materials, substances, or waste within a 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 discussed in Section 4.9.1.2 Existing Conditions, the Project Site is on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 due to a diesel fuel release in 2000 that occurred adjacent to Service Building 89, which is located in an area of the Lumileds campus between the proposed DC North and DC West buildings. Soil and groundwater impacts from the release were investigated in September and October 2000, and subsequent groundwater extraction removed approximately 5,500 gallons of diesel impacted groundwater. In August 2003, the RWQCB issued a Case Closed status for the release incident after concluding that the diesel fuel contamination appeared localized in the vicinity of the release and that concentrations of residual petroleum appeared to be stable. As discussed above under checklist question b), the Project would implement PDM HAZ-1, which requires completion of a Phase II Environmental Site Assessment for agriculture pesticide contamination that may be present in site soils from prior farming activities. This investigation would also identify if soils contaminated with petroleum hydrocarbons from diesel fuel are present. A Site Management Plan, Removal Action Plan, or equivalent document would then be prepared to outline the removal and disposal of contaminated soil prior to ground-disturbing activities. As a result, hazardous soil contamination exposure to construction workers or

adjacent uses would be prevented. Therefore, the Project would not create a significant hazard to the public or environment. **(Less than Significant 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 Project Site is approximately 1,400 feet northeast of the San José Mineta International Airport. As described in Section 4.9.1.2 Existing Conditions, while the Project Site is not located within a CLUP-defined safety zone, the Project Site is located within the airport's AIA. The AIA is a composite of the areas surrounding the airport that are affected by noise, height, and safety considerations.⁹⁷

The Project would be subject to the applicable safety and noise policies identified in the CLUP. As a nonresidential land use, the Project would be compatible with the land use policies of the CLUP. Aircraft noise levels at the Project Site are discussed under checklist question f) in Section 4.13, Noise and Vibration of this Application.

As described in Section 4.9.1.2 Existing Conditions, any structure exceeding 40 feet in height at the Project Site would require submittal to the FAA to determine the potential for the Project to create an aviation hazard. Additionally, as the proposed Project would have a maximum height of 81.4 feet at the top of the rooftop mechanical equipment, notification to the FAA is required to determine the potential for the Project to create an aviation hazard. The Project Applicant has engaged a consultant to prepare a thermal plume analysis to assess the potential effects of the thermal plumes from the backup generating facilities on airport operations. The analysis is underway and will be submitted under separate cover. The Project Applicant has also filed FAA Forms 7460 with the FAA to determine the potential for the Project to create an aviation hazard.

(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 City's 2024 EOP principally is designed to establish the foundational policies and procedures that define how the City will effectively prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. This includes assigning City departmental roles and responsibilities during disaster response and recovery activities, establishing communication and coordination procedures, and the logistics for disseminating information and resources, among other similar items.

⁹⁷ Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County Norman Y. Mineta San José International Airport*. March 27, 2024. Page 3-18.

Emergency vehicles would be able to access DC North via the right-in only driveway off Orchard Parkway and exit via the private access road that leads to West Trimble Road. DC North would have two entrances for emergency vehicles with one that leads directly to the data halls and further entrance providing access to the service yard. At DC West, emergency vehicles would enter the site via the right-in only driveway off West Trimble Road and exit via the right-out driveway that leads to West Trimble Road. Unlike DC North, emergency vehicles accessing the DC West site would need to travel around the western boundary of DC West to access the data halls and service yard. Access to the Project's substation and PG&E's switchyard would also be provided via the DC West site.

As discussed under checklist question d) in Section 4.17 Transportation, the Project Site would be accessible for emergency vehicles. Additionally, the Project would be constructed in accordance with current state and local building and fire codes to ensure structural stability and safety. The San José Fire Department would review the final site design for consistency with applicable fire department standards. For these reasons, construction and operation of the Project would not impair implementation of or physically interfere with the City's adopted EOP. **(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?

As discussed in Section 4.9.1.2 Existing Conditions, the Project Site is located in an urbanized area of San José and is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Further, as described above under checklist question f), the Project would be constructed in accordance with current state and local building and fire codes to ensure structural stability and safety and the final site design would be reviewed by SJFD for consistency with applicable fire department standards. **(Less than Significant 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 Spill Prevention, Control, and Countermeasure Plan 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 has been identified in the immediate project vicinity. The Project would implement PDMs 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

The following discussion is based on a Floodplain Blockage Review prepared by Schaaf & Wheeler Consulting Civil Engineers dated March 31, 2025 and a Flood Conditions Memorandum prepared by HMM dated March 20, 2025. Copies of the reports are included as Appendix K and Appendix L of this SPPE Application, respectively.

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 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.⁹⁸

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. An Special Flood Hazard Areas 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.

⁹⁸ 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 May 22, 2024.
https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

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 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 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.⁹⁹ 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-

⁹⁹ 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.

related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flow-controlled reservoir, or, in a catchment that drains to channels that are tidally influenced; or (3) the project is located in a catchment or subwatershed that is highly developed (i.e., that is 70 percent or more impervious).¹⁰⁰

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 2030.¹⁰¹ 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.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Valley Water also provides stream stewardship and is the wholesale water supplier throughout the county, which includes the groundwater recharge program. Well construction and deconstruction permits, including borings 45 feet or deeper, are required under Valley Water's Well Ordinance 90-1. Under Valley Water's Water Resources Protection Ordinance, projects within Valley Water property or easements are required to obtain encroachment permits.

2021 Groundwater Management Plan

The 2021 Groundwater Management Plan (GWMP) describes the Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley

¹⁰⁰ 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.

¹⁰¹ 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.

Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes the District's State Water Project and Central Valley contract supplies and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the District's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu groundwater recharge through the provision of treated surface water and raw water, acquisition of supplemental water supplies, and water conservation and recycling.¹⁰²

Post-Construction Urban Runoff Management (City Council Policy No. 6-29)

The City of San José's Policy No. 6-29 implements the stormwater treatment requirements of Provision C.3 of the MRP. City Council Policy No. 6-29 requires new development and redevelopment projects to implement post-construction Best Management Practices (BMPs) and Treatment Control Measures (TCMs). This policy also established specific design standards for post-construction TCMs for projects that create or replace 10,000 square feet or more of impervious surfaces.

Post-Construction Hydromodification Management (City Council Policy No. 8-14)

The City of San José's Policy No.8-14 implements the hydromodification management requirements of Provision C.3 of the MRP. Policy No. 8-14 requires new development and redevelopment projects that create or replace one acre or more of impervious surface area, and are located within a subwatershed that is less than 65 percent impervious, to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt generation, or other impacts to local rivers, streams, and creeks. The policy requires these projects to be designed to control project-related hydromodification through a Hydromodification Management Plan (HMP). Projects that do not meet the minimum size threshold, drain into tidally influenced areas or directly into the Bay, or are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious would not be subject to the HMP requirement.

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.

¹⁰² Valley Water. 2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins. November 2021.

Envision San José 2040 General Plan

The General Plan includes the following hydrology and water quality policies applicable to the proposed project.

Policy	Description
ER-8.1	Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.
ER-8.3	Ensure that private development in San José includes adequate measures to treat stormwater runoff.
ER-8.5	Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff on-site.
ER-10.5	Protect groundwater recharge areas, particularly creeks and riparian corridors.
EC-4.1	Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and stormwater controls.
EC-5.7	Allow new urban development only when mitigation measures are incorporated into the project design to ensure that new urban runoff does not increase flood risks elsewhere.
EC-5.16	Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.
EC-7.10	Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.
IN-3.9	Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.

4.10.1.2 *Existing Conditions*

Hydrology and Drainage

The Project Site includes a graded and vacant parcel along with surface parking lots. Surface runoff from the Project Site, the Intersection Improvement Area, and surrounding vicinity is collected by storm drains within West Trimble Road and Orchard Parkway and ultimately discharged to the Guadalupe River.¹⁰³ The Guadalupe River Watershed drains approximately 171 square miles, originating in the eastern Santa Cruz Mountains, continuing on the Santa Clara Valley floor until its discharge point at the Lower South San Francisco Bay.¹⁰⁴

¹⁰³ City of San José. *Envision San José 2040 General Plan Integrated Final Program Environmental Impact Report*. SCH: 2009072096. September 2011. Page 540, Figure 3.7-1.

¹⁰⁴ Santa Clara Valley Urban Runoff Pollution Prevention Program. "Guadalupe Watershed." Accessed March 27, 2025. <https://scvurppp.org/watersheds/santa-clara-basin-watersheds/guadalupe-watershed/>.

Surface Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Surface runoff from the Project Site and surrounding area is collected by storm drains and discharged to the Guadalupe River. The runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, and animal feces), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain. The Guadalupe River is currently listed on the 303(d) list for bifenthrin, chlordane, diazinon, mercury, pyrethroids toxicity, and trash.¹⁰⁵

Groundwater

The Project Site is located in the Santa Clara Plain portion of Santa Clara Subbasin, which covers 280 square miles extending from the southern San Francisco Bay to the Coyote Narrows near Metcalf Road.¹⁰⁶ The Project Site is not within a designated groundwater recharge zone or near groundwater recharge zones.¹⁰⁷ Based on the Geotechnical Investigation prepared for the Project, groundwater was encountered at boring depths of approximately 10 to 15 feet below ground surface.¹⁰⁸ It was concluded that the design groundwater elevation should be assumed to be 17 feet below ground surface.¹⁰⁹ Groundwater levels at the site may fluctuate with time due to seasonal conditions, rainfall, and irrigation practices.

Flooding and Other Hazards

A majority of the DC North boundaries and a small portion of the DC West boundaries are within a FEMA flood zone designated AH. The AH flood zone is an area with a one percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from one to three feet. The regulatory base flood elevation in this area is 27 feet NAVD 88. The Intersection Improvement Area at the intersection of West Trimble Road and Orchard Parkway are is located in Flood Zone AH. The floodway areas in Zone AH include the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the one percent annual chance flood can be carried without substantial increase in flood heights. The remainder of the Project Site

¹⁰⁵ The Clean Water Act (CWA), Section 303, establishes water quality standards and Total Maximum Daily Load (TMDL) programs. The 303(d) list is a list of impaired water bodies. State Water Resources Control Board. “2024 Integrated Report.” Accessed March 27, 2025.

¹⁰⁶ Valley Water. *Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. Page 2-2. November 2021.

¹⁰⁷ Ibid. Figure 2-1.

¹⁰⁸ Langan Engineering and Environmental Service, Inc. *Geotechnical Investigation Advanced Manufacturing Building*. January 20, 2023. Page 7.

¹⁰⁹ Ibid. Page 18.

is within FEMA flood zone X, which is an area with a 0.2 percent annual chance flood, with average depths of less than one foot or with drainage areas less than one square mile.¹¹⁰

In addition to the FEMA flood zone maps, the City of San José has completed its own flood risk analysis for this Project area under the North San Jose Floodplain Management Policy (NSJFMP). The NSJFMP specifies 100-year flood levels, which vary between 26 feet and 28 feet NAVD88 for the Project Site. The NSJFMP flood elevations are higher than the elevation specified by FEMA. Furthermore, the NSJFMP also requires an analysis of flood conveyance, which is the portion of the site where the finished grade is equal to or below the existing sidewalk elevation. Flood conveyance represents the area of the Project Site where shallow surface waters will pass before flood water elevations exceed the existing sidewalk elevation. The Project Site is located in an area that allows a site to have up to a 75 percent blockage as measured in a cross-section in an east-west direction with 25 percent of the area reserved for shallow flood water conveyance.¹¹¹

Seiche and Tsunamis

A seiche is the resonant oscillation of water generated in an enclosed body of water, such as San Francisco Bay, from seismic activity. Seiches are related to tsunamis for enclosed bays, inlets, and lakes. These tsunami-like waves can be generated by earthquakes, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures and volcanic eruptions. The strong currents associated with these events may be more damaging than inundation by waves. Based on the General Plan Final Program EIR, the risk of a seiche occurring is low since development allowed under the General Plan (which includes this Project) would not occur close enough to enclosed water bodies for seiches to have substantial effects.¹¹²

A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. The nearest tsunami hazard area is within the northern section of San José adjacent to the San Francisco Bay and Guadalupe and Alviso sloughs.^{113,114}

Due to the Project Site's inland location, elevation above sea level, and distance from large bodies of water (i.e., the San Francisco Bay), it is not subject to seiche or tsunami hazards, or sea level rise.

¹¹⁰ Federal Emergency Management Agency. "National Flood Hazard Layer FIRMette Number 06085C0068J." Effective on February 19, 2024. Accessed March 27, 2025.
https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/jbb8f72934c5244d08770ea1949dd45ae/scratch/FIRMETTE_cc7a7476-d255-4e83-b502-3a6888177f65.pdf.

¹¹¹ HMM. *Flood Conditions for NorthTown Data Center Site (330 W Trimble Road, San José CA)*. March 20, 2025. Page 1.

¹¹² City of San José. *Envision San José 2040 General Plan Integrated Final Program Environmental Impact Report*. SCH: 2009072096. September 2011. Page 519.

¹¹³ Ibid. Page 505.

¹¹⁴ California Department of Conservation. "Tsunami Hazard Area Map." Accessed March 27, 2025.

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:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of 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?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) 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-Related Water Quality Impacts

Construction activities, such as grading and excavation, may result in temporary impacts to surface water quality in local waterways. When disturbance to underlying soil occurs, surface water that flows across the site may contain sediments may be dislodged and discharged to the storm drainage system. The Project would disturb over 28.5 acres, which requires that the Project obtain a NPDES General Permit for Construction. Prior to initiating grading activities, the Project Applicant will file a Notice of Intent with the SWRCB and prepare a SWPPP prior to commencement of construction to establish methods for controlling discharge associated with construction activities. Additionally, all development projects in San José are also required to comply with the City of San José's Grading

Ordinance regardless whether the Project is required to obtain an NDPES General Construction Permit.¹¹⁵ Consistent with the City's General Plan to reduce construction-related water quality impacts, the following City's Standard Permit Conditions below would be implemented and are incorporated as PDM HYD-1.1.

PDM HYD-1.1: Stormwater Best Management Practices. Consistent with applicable provisions of the General Plan, standard permit conditions that shall be implemented to prevent stormwater pollution and minimize potential sedimentation during construction include, but are not limited to, the following:

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities shall be suspended during periods of high winds and when other dust reducing measures are ineffective.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be covered and all trucks shall maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the Project Site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system shall be installed if requested by the City.
- The Project Applicant shall comply with the City of San José Grading Ordinance, including implementing erosion and dust control during site preparation and with the applicable City of San José Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.

Additionally, an Erosion Control Plan would be prepared for the Project (in accordance with all applicable standards and requirements) because over one acre of soil would be disturbed, and the Project Site (as well as the Intersection Improvement Area) is adjacent to a waterway, the Guadalupe River (refer to Section 4.7 Geology and Soils). The Erosion Control Plan will be required

¹¹⁵ The San José Grading Ordinance requires the use of erosion and sediment controls to protect water quality when a site is under construction.

to detail the BMPs to be implemented during the construction phases to prevent the discard of stormwater pollutants and minimize erosion.

As noted in Section 3.3.9.4 Site Grading, Demolition, Excavation, and Construction, the utilities and deep foundations may require excavation at depths lower than four feet. Groundwater was found at depths of 10 to 15 feet below ground surface as described in Section 4.10.1.2 Existing Conditions. Therefore, the Project could possibly impact groundwater during construction. To reduce impacts to groundwater, the Project would include the following dewatering PDM to ensure runoff from construction is treated properly before being discharged.

PDM HYD-1.2: The discharge of any water from construction dewatering activities shall be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements or wastewater discharge permit conditions to the sanitary sewer. For short-term discharge (less than 1-year), a discharge permit shall be obtained from the City of San José's Watershed Protection Division and the water discharged to the sanitary sewer. For long term discharge (greater than 1-year), the Project Applicant shall obtain a NPDES permit from the Regional Water Quality Control Board (RWQCB) for discharge to the storm system.

Both discharge permits require pre-testing of the water to determine if the water meets the respective City or RWQCB pollutant discharge limits. The water shall be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the Project Applicant shall work with the RWQCB and the City of San José to determine appropriate disposal options and then implement said disposal option. A copy of the discharge permit or NPDES permit, whichever is applicable, shall be submitted to the Director of Planning, Building and Code Enforcement, or their designee prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest).

With implementation of the Construction General Permit requirements and City standard permit conditions via PDM HYD-1.1 and the dewatering measures required by PDM HYD-1.2, construction of the proposed Project, would not result in significant water quality impacts during construction.
(Less than Significant Impact)

Post-Construction Impacts

Construction of the Project would result in the replacement of more than 5,000 square feet of impervious surface at the Project Site. Therefore, the Project would be required to comply with Provision C.3 of the MRP. This requires the project to incorporate site design, source control and runoff treatment controls to reduce the rates, volumes and pollutant loads of runoff from the project. The MRP requires all post-construction stormwater runoff to be treated by numerically

sized LID treatment controls, such as biotreatment facilities, unless the project is granted Special Project LID Reduction Credits, which would allow the project to implement non-LID measures for all or a portion of the site depending on the project characteristics. In addition to the requirements of Provision C.3, the Project would be subject to the San José Public Works Department Standard Permit Conditions identified above, which mandate compliance with the City's Post-Construction Urban Runoff Management Policy (Policy 6-29).

As described under Section 3.4 Stormwater Treatment and shown in Sheet Index C 4.0 in Appendix A, the Project would include the construction of LID bioretention areas and at-grade flow-through planter boxes totaling approximately 36,000 square feet. Furthermore, runoff from new impervious surfaces would be directed to drain into bioretention areas or flow-through planers. These stormwater treatments would promote on-site infiltration and reduce stormwater runoff on-site. With the implementation of stormwater treatment measures, the Project would comply with the City's stormwater management requirements and result in a less than significant impact on water quality. Additionally, the Project would not impact groundwater quality during construction with implementation of PDM HYD-1.2 described above. Therefore, the proposed Project would result in less than significant impacts on runoff and groundwater post-construction. **(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?
-

The proposed Project is located within the Santa Clara Subbasin, one of two groundwater basins located within the City of San José Urban Growth Boundaries. The Santa Clara Subbasin has not been identified as a groundwater basin in a state of overdraft, as the Valley Water District actively manages the aquifer by importing water for recharge. As described in Section 4.10.1.2 Existing Conditions, the Project Site is not located within a groundwater recharge area. Although the Project would increase the demand for water (refer to Section 4.19 Utilities and Service Systems for a discussion of the Project's water demand), within the City, this increase was evaluated in a Water Supply Assessment which found adequate supplies would be available during normal water years, would not require the installation of new groundwater well(s) and would not result in the overdraft of any groundwater basins. In the event dewatering is required during construction, it would be limited in duration and magnitude and not substantially decrease supplies or interfere with recharge. **(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?
-

Construction of the proposed data centers and Intersection Improvement Area would alter the existing drainage pattern on the project site and surrounding area since development of the Project would increase impervious surface area. However, the Project would not alter the course of a stream or river since no water ways are on-site, the Guadalupe River is separated from the project site by a levee, and the project would not encroach into the riparian setback for the Guadalupe River.

Post-construction stormwater runoff from the Project's impervious surfaces would be directed towards flow-through planters and bioretention throughout the Project Site for treatment, consistent with the MRP and City of San José Policy 6-29, and as shown on Figure XX, Stormwater Control Plan. The proposed bioretention retention would remove pollutants and minimize the rate and volume of runoff from the Project Site, reducing the potential for runoff, erosion or siltation on and off-site. Additionally, the Project's proposed bioretention basins would allow percolation of stormwater into the ground and reduce the rate of stormwater runoff entering the City's storm drainage system.

With adherence to the requirements of Provision C.3 of the MRP and the City's Standard Permit Conditions, the Project would not create substantial new sources of polluted runoff. Finally, the Project would be required to manage erosion and sedimentation during construction in accordance with the City's Municipal Code and the Construction General Permit. For these reasons, the Project would not substantially increase erosion or increase the rate or amount of stormwater runoff. **(Less than Significant Impact)**

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

Flood Zone

As discussed in Section 4.10.1.2 Existing Conditions, portions of the Project Site and Intersection Improvement Area lie within flood zone AH with a given base flood elevation of 27 feet. The Project Site is also within the boundaries of the NSJFMP. The 100-year flood level elevations from the NSJFMP for the Project Site vary between 26 feet and 28 feet for the site. Since the NSJFMP flood elevations are higher than those mapped by FEMA, the NSJFMP flood elevation govern the building finish floor elevations which would be set at least one foot higher than the flood elevation. To

understand if the Project would be above the NSJFMP flood elevation and would alter existing grades and/or introduce structures that would impede flood waters moving across the site as required by the NSJFMP, a Floodplain Blockage Review of the Project Site was completed by a qualified civil engineer that specializes in hydrology.

The finish floor elevation of DC North would be 29 feet, while the finished floor elevation for DC West would be 30.25 feet. Site equipment would be elevated to 29 feet. Therefore, the data center buildings and associated equipment would be elevated above the 100-year floodplain identified in the NSJFMP.

In addition, the NSJFMP would require that a minimum of 25 percent of the Project Site be at a lower elevation than the existing back of walk for any section through the site taken perpendicular to the flood conveyance path (generally perpendicular to North 1st Street). In other words, the maximum site blockage allowed on the Project Site is 75 percent, and at least 25 percent of the site must allow for flood waters to pass north through the site. To comply with this requirement, the finished grades of the eastern half of the Project Site would be required to be graded to not exceed the existing sidewalk elevation, essentially maintaining existing topography. This means that the eastern portion of the Project Site would be graded to act as a flood conveyance path extension of Orchard Parkway and would allow for shallow floodwaters to pass through the Project Site.¹¹⁶ As concluded in the Floodplain Blockage Review, the proposed Project complies with the NSJFMP flood conveyance requirements since the Project meets the 75 percent maximum allowable blockage allowed.¹¹⁷ Also as described under checklist question a) in Section 4.9 Hazards and Hazardous Materials above, no fueling activities would occur in areas designated to convey floodwaters through the Project Site, and fuels stored on-site would be subject to a Hazardous Materials Business Plan (as required by APSA) to ensure safe-handling and storing of chemicals. In addition, the removal of the existing pedestrian refuge (pork-chop) islands at the southwest and southeast corners of the Trimble Road and Orchard Parkway intersection would not alter the ability of floodwaters to pass through since no new infrastructure would be constructed post-removal. There would be no new development to block floodwaters; therefore, flood flows would be allowed to move unobstructed. For these reasons, the Project would result in a less than significant risk for releasing pollutants due to inundation. **(Less than Significant Impact)**

Tsunami and Seiche

As discussed in Section 4.10.1.2 Existing Conditions, the Project would not be located adjacent to any large bodies of water (i.e., the San Francisco Bay), nor would the Project be located within a designated tsunami inundation zone. The Project Site (as well as the Intersection Improvement Area) is located on relatively flat terrain within an urban area of San José not near a large body of water. Therefore, the proposed Project would not risk release of pollutants due to inundation by tsunami or seiche. **(Less than Significant Impact)**

¹¹⁶ Schaaf & Wheeler Consulting Civil Engineers. *NorthTown Data Center Floodplain Blockage Review*. March 31, 2025. Page 4.

¹¹⁷ Ibid. Page 5.

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

Water Quality Control

As discussed in checklist question a), the Project would comply with the City's Post-Construction Urban Runoff Policy 6-29 and Provision C.3 of the RWQCB MRP requirements, and would implement PDMs (such as PDM HYD-1) addressing construction- and operational-related surface runoff quality. Thus, the Project would not conflict with or obstruct implementation of the San Francisco Bay Basin Plan.

Santa Clara Plain and Llagas Subbasin Groundwater Management Plan

As discussed in checklist question b), the Project Site is within the Santa Clara Plain groundwater subbasin, and this subbasin has not been identified in the GWMP as being overdrafted. Additionally, the Project would include LID stormwater management treatment tools, such as bioretention basins and flow-through planters, to control runoff on-site. The proposed stormwater treatment design would also route runoff to on-site treatment facilities (e.g., bioretention basins and self-treating landscaped areas) where the water would be detained and then released to the City's storm drain system. During construction, all runoff would be testing and treated as required by PDM HYD-1.2 prior to discharge, which would ensure polluted water does not filter into the groundwater. Furthermore, the Project would not substantially decrease groundwater supplies or substantially interfere with groundwater recharge. Therefore, implementation of the Project would not interfere with any actions set forth by Valley Water in its GWMP regarding groundwater recharge, transport of groundwater, and/or groundwater quality.

For these reasons, with compliance with the regional and local regulatory requirements, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable 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?

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 the amount of stormwater runoff from the Project Site but would be required to comply with the Construction General Permit 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.

Cumulatively, other projects of similar scale in San José 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*

Regional and Local

Airport Plans and Regulations

The San José Mineta International Airport is owned and operated by the City of San José. It is regulated by various federal, state, and local laws and regulations, including the Code of Federal Aviation Regulations. Part 77 of the Federal Aviation Regulations (FAR) regulate obstructions to navigable airspace, as described in Section 4.9 Hazards and Hazardous Materials of this SPPE. The Project Site is located within the Airport Influence Area (AIA) established by the Santa Clara County Airport Land Use Commission (ALUC) in its Comprehensive Land Use Plan (CLUP) for the airport. The AIA is a composite of areas surrounding the airport that are affected by noise, height, and safety considerations, and the CLUP sets forth standards and policies for land use compatibility with these airport considerations.

4.11.1.2 *Existing Conditions*

For land use entitlement purposes, the Project site is separated into two parcels: DC North and DC West. The DC North entitlement area consists of the approximately 10.5-acre undeveloped area where the DC North data center building would be developed, while the DC West entitlement area consists of the remaining approximately 18 acres of the Project Site. The DC West entitlement area has a General Plan designation and zoning of Combined Industrial Commercial (CIC). The DC North entitlement area is designated Industrial Park (IP) and zoned IP Planned Development [IP(PD)].

The CIC designation allows a mixture of compatible commercial and industrial uses that are intended for commercial, office, or industrial developments. This designation occurs in areas where the existing development pattern exhibits a mix of commercial and industrial land uses or in areas on the boundary between commercial and industrial uses. Development intensity can vary significantly in this designation based on the nature of specific uses likely to occur in a particular area. A floor area ratio of up to 12.0 is allowed along with a maximum height of approximately 24 stories.

The CIC zoning district allows for a broad range of commercial uses and some industrial uses, primarily industrial parks. A maximum height of 50 feet is allowed unless an alternative maximum height restriction has been established as described in Municipal Code Chapter 20.85. In the North San José area, to the north and west of Interstate 880, the maximum allowable building height is

determined by the FAA limits and shall not exceed 250 feet in any event (Municipal Code Section 20.85.020).

The IP designation allows for a wide variety of industrial users such as research and development, manufacturing, assembly, testing and offices. This designation is differentiated from the Light Industrial and Heavy Industrial designations in that Industrial Park uses are limited to those for which the functional or operational characteristics of a hazardous or nuisance nature can be mitigated through design controls. A floor area ratio of up to 10.0 is allowed along with building heights between two to 15 stories

The IP(PD) zoning designation allows for a wide variety of industrial uses such as R&D, manufacturing, assembly, testing purposes, and offices. A maximum height of 50 feet is allowed unless an alternative maximum height restriction has been established as described in Municipal Code Chapter 20.85. In the North San José area, to the north and west of Interstate 880, the maximum allowable building height is determined by the FAA limits and shall not exceed 250 feet in any event (Municipal Code Section 20.85.020).

Surrounding Land Uses

An existing industrial campus to the north across West Trimble Road and the Lumileds headquarters building to the south have the same General Plan IP designation. The surface parking lots of the Lumileds headquarters to the southeast and southwest of the Project Site have a land use designation of Combined/Industrial Commercial. The office campus to the east of the Project Site is designated as Transit Employment Center. To the south of the site, there is a vacant office building and parking lot designated as IP. Further to the north and west of the site is the Guadalupe River and trail, designated as Open Space, Parklands and Habitat.

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:

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

4.11.2.1 *Project Impacts*

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

A physical division of an established community typically refers to the construction of a physical feature (such as a wall, roadway, or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community or between communities.

As proposed, the Project would construct the proposed DC North and DC West buildings within existing established parcels. The proposed Project does not include any features that would physically divide the community (e.g., roadway, railway, or highway) or restrict movement within the surrounding community. The proposed Project would be similar in nature to the other industrial development in the Project area and would not physically divide an established community. **(Less than Significant 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 proposed Project would develop an approximately 28.5-acre Project Site with two data center buildings, a substation, and other associated infrastructure to support the two proposed data centers. Structures on both DC West and DC North would have a maximum height of 81.4 feet to the top of the rooftop mechanical equipment and a floor area ratio of 0.22.

The Project would be consistent with the General Plan designation of CIC (DC West) and IP (DC North) since a data center use would be allowed under these land use designations. Furthermore, the floor area ratios of 0.22 for both buildings would not exceed the CIC floor area ratio of 12.0 or the IP floor area ratio of 10.0. The DC West entitlement area is zoned CIC while the DC North entitlement area is zoned IP(PD). Under both zoning districts, the maximum allowable height is 50 feet. The proposed DC West and DC North buildings would exceed the allowable 50 foot height. However, the City's Zoning Code provides geographic area-specific height restrictions which supersede those set forth by individual zoning districts. In the North San José area, to the north and west of Interstate 880, the maximum allowable building height is determined by the FAA limits and shall not exceed 250 feet in any event (Municipal Code Section 20.85.020). Both proposed data center buildings would be under the maximum height of 250 feet allowed by the Zoning Code and would be reviewed by the FAA to ensure the proposed building heights do not pose an aviation hazard (refer to Section 4.9 Hazards and Hazardous Materials).

The Project's consistency with applicable General Plan policies and Municipal Code requirements pertaining to specific environmental impacts are discussed throughout this SPPE Application in the relevant resource areas. For these reasons, the proposed Project would not result in environmental impacts due to conflict with the General Plan or Zoning Code or any other land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

Compatibility with Airport Operations

The San José Mineta International Airport is located approximately 1,400 feet southwest of the project site. The Project Site is located within the AIA for the airport, as shown in Figure 8 of the Comprehensive Land Use Plan for the San José Mineta International Airport.¹¹⁸ Refer to Section 4.9 Hazards and Hazardous Materials, for a discussion of Project compliance with FAA regulations and General Plan policies regarding aircraft safety.

Pursuant to City and ALUC policy, the Project would be required to notify the FAA and obtain an issuance of "no hazard" determination prior to Project approval. The Project would be required to grant an Avigation Easement over the Project Site as a Condition of Project Approval. The recorded easement would provide for acceptance of aircraft noise and other effects of aircraft flyovers. By requiring the proposed Project to comply with applicable General Plan policies and 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)**

Santa Clara Valley Habitat Plan

As discussed under checklist question f) in Section 4.4 Biological Resources, the proposed Project is considered a covered activity under the Habitat Plan, and with implementation of PDM BIO-4(i.e., conformance with applicable Habitat Plan conditions and fees), the Project would not conflict with provisions of the Habitat Plan. **(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 City's 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.

¹¹⁸ Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County Norman Y. Mineta San José International Airport*. March 27, 2024. Figure 8.

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.

Pursuant to the mandate of the SMARA, the SMGB has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, SR 87, and Hillsdale Avenue as containing mineral deposits that are of regional significance as a source of construction aggregate materials. Neither the State Geologist nor the SMGB have classified any other areas in San José as containing mineral deposits of statewide significance or requiring further evaluation.

4.12.1.2 *Existing Conditions*

The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Mount Hamilton-Diablo Range were exposed by continuous tectonic uplift and regression of the inland sea that had previously inundated the area. As a result of this process, the topography of the City is relatively flat and there are no significant mineral resources.

Pursuant to the mandate of the SMARA, the SMGB has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, SR 87, and Hillsdale Avenue as containing mineral deposits that are of regional significance as a source of construction aggregate materials.¹¹⁹ The Project Site and Intersection Improvement Area are located approximately seven miles northwest of Communications Hill. Neither the State Geologist nor the SMGB have classified any other areas in San José as containing mineral deposits of statewide significance or requiring further evaluation.

¹¹⁹ City of San José. *Envision San José 2040 General Plan*. Adopted November 1, 2011. As Amended on October 24, 2024. Page 36, Chapter 3 Environmental Leadership.

4.12.2 Impact Discussion

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

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

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?
-

As discussed in Section 4.12.1.2 Existing Conditions, the Project Site and Intersection Improvement Area are not located in an area containing any known mineral resources. Implementation of the Project would not result in the loss of availability of any known resources.

(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?
-

As stated in Section 4.12.1.2 Existing Conditions, the only identified mineral resources in San José are located within the Communications Hill area. The Project Site and Intersection Improvement Area are approximately seven miles northwest of Communications Hill. Therefore, the proposed Project would not result in the loss of availability of a locally important mineral resource. **(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 Project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Therefore, the 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 on a Noise and Vibration Assessment prepared by Illingworth & Rodkin, Inc. dated June 2025. A copy of the report is included as Appendix M of this SPPE Application.

4.13.1 Environmental Setting

4.13.1.1 *Regulatory Framework*

4.13.1.2 *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.¹²⁰ 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.

¹²⁰ 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} .

4.13.1.3 Regulatory Framework

State and Local

California Building Standards Code

The California Building Code establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources do not exceed 45 L_{dn} /CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

Comprehensive Land Use Plan for Reid-Hillview Airport

The Comprehensive Land Use Plan (CLUP) for Reid-Hillview Airport, adopted by the Santa Clara County Airport Land Use Commission on October 24, 2007 and amended on November 18, 2020, is intended to safeguard the general welfare of the inhabitants within the vicinity of the airport and the aircraft occupants. The CLUP is also intended to ensure that surrounding new land uses do not affect the airport's continued operation.

Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to noise and vibration and are applicable to the proposed Project.

Policies	Description
EC-1.1	Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, State and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include: Interior Noise Levels The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected <i>Envision General Plan</i> traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan. Exterior Noise Levels The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses [refer to Table EC-1 in the General Plan or

Policies	Description
	Table 4.13-1 in this SPPE]. The acceptable exterior noise level objective is established for the City, except in the environs of the San José International Airport and the Downtown, as described below: - For new multi-family residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. Some common use areas that meet the 60 dBA DNL exterior standard will be available to all residents. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas. On sites subject to aircraft overflights or adjacent to elevated roadways, use noise attenuation techniques to achieve the 60 dBA DNL standard for noise from sources other than aircraft and elevated roadway segments. - For single family residential uses, use a standard of 60 dBA DNL for exterior noise in private usable outdoor activity areas, such as backyards
EC-1.2	Minimize the noise impacts of new development on land uses sensitive to increased noise levels [Land Use Categories 1, 2, 3 and 6 in Table EC-1 in the General Plan or Table 4.13-1 in this SPPE] by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would: • Cause the DNL at noise sensitive receptors to increase by 5 dBA DNL or more where the noise levels would remain “Normally Acceptable”; or • Cause the DNL at noise sensitive receptors to increase by 3 dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level.
EC-1.7	Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City’s Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would: • Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months. For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.
EC-2.3	Require new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or building that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to: excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any

Policies	Description
	buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

Table 4.13-1: General Plan Noise Land Use Compatibility Guidelines

Land Use Category	Exterior DNL Value in Decibels					
	55	60	65	70	75	80
1. Residential, Hotels and Motels, Hospitals and Residential Care ¹						
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
3. Schools, Libraries, Museums, Meeting Halls, and Churches						
4. Office Buildings, Business Commercial, and Professional Offices						
5. Sports Arena, Outdoor Spectator Sports						
6. Public and Quasi-Public Auditoriums, Concert Halls, and Amphitheaters						
Notes: ¹ Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required. Normally Acceptable:  Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. Conditionally Acceptable:  Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise mitigation features included in the design. Unacceptable:  New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.						

4.13.1.4 Existing Conditions

Existing Noise Environment

The noise environment at the Project Site and in the surrounding area results primarily from vehicular traffic along West Trimble Road and Orchard Parkway, and from the operation of

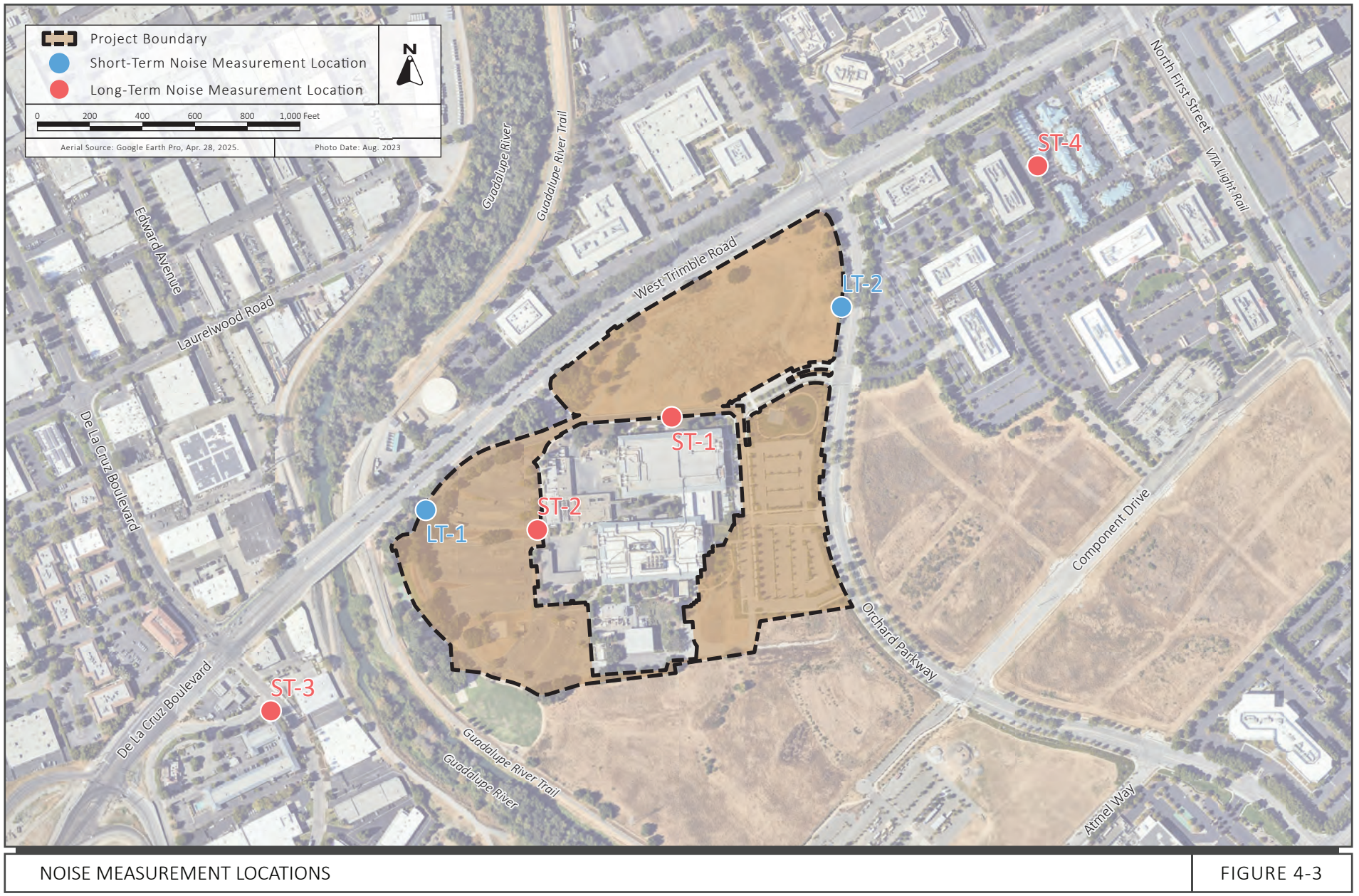
mechanical equipment at the adjacent Lumileds facility. Aircraft associated with the San José Mineta International Airport also contribute to the noise environment in the area.

Existing Ambient Noise Levels

A noise monitoring survey was performed at the site beginning on Tuesday, March 18, 2025, and concluding on Friday, March 21, 2025. The monitoring survey included two long-term (LT-1 and LT-2) and four short-term (ST-1 through ST-4) noise measurements, which are shown in Figure 4-3, and Table 4.13-2 lists the short-term noise measurements. The long-term measurement at LT-1 was 68 dBA DNL and at LT-2 ranged from 69-71 dBA DNL.

Table 4.13-2: Short-Term Noise Measurements

Noise Measurement Location	Date, Time	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1: Northern edge of Lumileds building	3/18/25, 1:10-1:20 PM	74	70	59	53	49	58
ST-2: Western gate of Lumileds building	3/18/25, 1:30-1:40 PM	77	74	67	61	60	65
ST-3: La Quinta Inn, 2585 Seaboard Avenue	3/18/25, 1:50-2:00 PM	83	80	69	58	55	67
ST-4: Homewood Suites, 10 West Trimble Road	3/18/25, 2:20-2:30 PM	74	72	54	48	44	57
ST = short-term; L_{max} = maximum A-weighted noise level during the measurement period; $L_{(1)}$, $L_{(10)}$, $L_{(50)}$, $L_{(90)}$ = The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period; L_{eq} = The average A-weighted noise level during the measurement period.							
Illingworth & Rodkin. <i>NorthTown Data Center Project Noise and Vibration Assessment</i> . June 2025							



Existing Noise-Sensitive Receptors

The nearest noise sensitive receptors to the project site are residences located approximately 3,600 feet to the northwest of the Project site. There are also two hotels in the vicinity, approximately 1,000 feet from the Project Site. There no sensitive historical structures located within 200 feet of the project site.¹²¹

4.13.2 Impact Discussion

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

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

City of San José Standards

The City of San José relies on the following guidelines and standards for new development to avoid impacts above the CEQA thresholds of significance outlined above.

Construction Noise

For temporary construction-related noise to be considered significant, construction noise levels would have to exceed ambient noise levels by 5.0 dBA L_{eq} or more and exceed the normally acceptable levels of 60 dBA L_{eq} at the nearest noise-sensitive land uses or 70 dBA L_{eq} at office or commercial land uses for a period of more than 12 months.

Operational Noise

The City of San José considers a significant noise impact to occur where existing noise sensitive land uses would be subject to permanent noise level increases of 3.0 dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level, or 5.0 dBA DNL or more where noise levels would remain normally acceptable. A significant noise impact would also be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan.

¹²¹ Illingworth & Rodkin. *NorthTown Data Center Project Noise and Vibration Assessment*. June 2025. Pages 21 and 22.

Construction Vibration

The City of San José relies on guidance developed by Caltrans to address vibration impacts from development projects in San José. A vibration limit of 12.7 millimeters per second (mm/sec; 0.5 inch/sec) PPV is used for buildings that are structurally sound and designed to modern engineering standards. A conservative vibration limit of 5.0 mm/sec (0.2 inches/sec) PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 2.0 mm/sec (0.08 inches/sec) PPV is used to provide the highest level of protection.

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 Noise

Policy EC-1.7 of the City's General Plan requires that all construction activities within the City use best available noise suppression devices and techniques and to limit construction hours near residential uses per the Municipal Code, which are between 7:00 AM and 7:00 PM on weekdays when construction occurs within 500 feet of a residential land use. Furthermore, the City considers a significant construction noise impact to occur if a project is located within 500 feet of a residential use or 200 feet of a commercial or office use and would involve substantial noise-generating activities continuing for a period of more than 12 months. As noted in Existing Conditions above, there are no residential uses within 500 feet of the site.

While the City of San José does not establish noise level thresholds for construction activities, this analysis uses the noise limits established by the Federal Transit Administration (FTA) to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits in the *Transit Noise and Vibration Impact Assessment Manual*.¹ During daytime hours, an exterior threshold of 80 dBA L_{eq} shall be applied at residential land uses and 90 dBA L_{eq} shall be applied at commercial and industrial land uses. Table 4.13-3 lists the noise level estimates at nearby land uses in proximity to the project. The noise levels do not assume reductions due to intervening buildings or existing barriers.

Table 4.13-3: Estimated Construction Noise Levels at Nearby Land Uses (dBA L_{eq})

Phase of Construction	Lumileds Building (150ft)	North Office Buildings (300ft)	Northeast Office Buildings (620ft)	West Office Building (700ft)
Site Preparation	80	74	68	67
Grading/Excavation/ Trenching/Foundation	82	76	70	69
Building/Facility Construction	77	71	65	64
Architectural Coating	65	59	53	52
Paving	77	71	65	64

L_{eq} = The average A-weighted noise level during the measurement period.

Illingworth & Rodkin. *NorthTown Data Center Project Noise and Vibration Assessment*. June 2025. Table 8.

As shown in Table 4.13-3, construction noise levels would intermittently range from 74 to 85 dBA Leq when activities occur 50 feet from nearby receptors. When focused near the center of the project site, construction noise levels would be below 85 dBA Leq at nearest commercial uses and below 90 dBA Leq at the nearest existing industrial buildings surrounding the site.

Although the project site is not located within 500 feet of existing residential uses, it is located within 200 feet of existing non-residential uses. Additionally, the total construction is expected to last for a period of more than 12 months. As a result, the City's Standard Permit Conditions for Noise are incorporated into the Project as a PDM to reduce construction noise levels to less than significant.

PDM NOI-1: Construction Noise Best Management Practices. The Project shall implement the following City of San José Standard Permit Conditions related to construction noise:

- Construct solid plywood fences or similar noise reducing mechanism around construction sites adjacent to operational business, residences, or other noise-sensitive land uses.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors (if any). Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses (if any).

- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the Intersection Improvement Area.
- Notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of “noisy” construction activities to adjacent land uses and nearby residences.
- If complaints are received or excessive noise levels cannot be reduced using the measures above, erect a temporary noise control blanket barrier along surrounding building facades that face the construction sites.
- Designate a “disturbance coordinator” who shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to current the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

With implementation of the PDM NOI-1, the Project would not result in a significant construction noise impact.

Operational Noise

Mechanical Equipment

Mechanical equipment at the data center buildings would include emergency generators, chillers, transformers, pumps, a cooling tower, and heating, ventilation, and air conditioning (HVAC) units. According to the site plan, generator yards would be located adjacent to the south sides of each of the data center buildings. Equipment such as hybrid closed-circuit cooling towers (CCCT), water-cooled chillers (WCC), and dedicated outside air systems (DOAS) units would be located on the rooftop of each data center building. A proposed screen would be located at the rooftop that would provide partial shielding. Manufacturer specifications in terms of source levels for each of the equipment (generators, CCCTs, WCC and DOAS) were provided by the applicant and are summarized in Appendix M.

Based on the source levels in Appendix M, SoundPLAN (version 8.2), a three-dimensional ray-tracing computer program, was used to create scenarios representing daily operations with and without the emergency generators. The mechanical equipment noise sources were modeled as either point-

sources (e.g., air handling units) or area sources (e.g., cooling towers) noise inputs to demonstrate the noise propagation to the adjacent sites based on the cumulative noise from the combined sources operating during the different scenarios. Other inputs to the models include the existing on-site and off-site buildings. Typically, not more than one generator would be tested in any one hour. For a worst-case scenario representation, one generator each from DC west and DC north each were modeled. The rooftop equipment (CCCT, WCC and DOAS) were assumed to run together continuously throughout the day.

Figure 4-4 and Figure 4-5 show the hourly average L_{eq} during typical daily operations without and with the emergency generators, respectively. Table 4.13-4 and Table 4.13-5 summarize the noise levels calculated in SoundPLAN at the nearest boundaries for the surrounding off-site receptors during daily operations without and with the emergency generators, respectively. The tables show the hourly average noise levels calculated at the nearest receiving commercial and industrial property lines from the mechanical equipment.

Table 4.13-4: Daily Operational Noise Levels without Emergency Generator Testing

Receptor	Distance from Center of Closest Data Center, feet	L_{eq} from Daily Operational Noise (No Generators), dBA
Lumileds Building	150	60
North Office & Industrial Buildings	300	60 to 62
West Office & Industrial Buildings	700	60
Northeast Office Buildings	620	55 to 57
Illingworth & Rodkin. <i>NorthTown Data Center Project Noise and Vibration Assessment</i> . June 2025. Table 9.		

Table 4.13-5: Daily Operational Noise Levels with Emergency Generator Testing

Receptor	Distance from Center of Closest Data Center, feet	L_{eq} from Daily Operational Noise (Generators), dBA
Lumileds Building	150	64
North Office & Industrial Buildings	300	60 to 62
West Office & Industrial Buildings	700	60
Northeast Office Buildings	620	55 to 58
Illingworth & Rodkin. <i>NorthTown Data Center Project Noise and Vibration Assessment</i> . June 2025. Table 10.		

As shown in Table 4.13-4 and Table 4.13-5, hourly average noise levels due to daily mechanical equipment operation with or without the emergency generator testing would not exceed the 60 dBA municipal code threshold at the northeast and west office buildings. Mechanical equipment noise would not exceed the 70 dBA municipal code threshold at the industrial uses (Lumileds) as

well. Section 20.80.2030 of the City's Municipal code limits generator testing to the hours of 7 AM to 7 PM which would be satisfied by the planned testing times of 8 AM to 6 PM.

The closest noise-sensitive receptors (hotels) are located at 2585 Seaboard Avenue and 10 West Trimble Road. Both hotel buildings are located more than 1,000 feet away from the closest data center building. At this distance, hourly average noise levels from the worst-case project operations (with generator) are calculated to range from 46 to 52 dBA L_{eq} . This is below the Municipal code limit of 55 dBA for residences, although the 60 dBA limit for commercial properties would apply since both hotels are located in a commercially zoned land use area (CIC – Combined Industrial/Commercial as per the General Plan 2040 Land Use Designation).

Project-Generated Traffic

The proposed data center project would generate 378 daily trips. The existing average daily traffic volumes along West Trimble Road and Orchard Parkway are about 38,000 trips. Adding 378 daily trips from the proposed project would not result in a measurable or detectable increase in noise levels in the area (0 dBA DNL increase). **(Less than Significant Impact)**



NOISE CONTOURS FOR DATA CENTER OPERATION WITHOUT EMERGENCY GENERATOR TESTING

FIGURE 4-4



NOISE CONTOURS FOR DATA CENTER OPERATION WITH EMERGENCY GENERATOR TESTING

FIGURE 4-5

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

Construction of the Project may generate vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include grading, foundation work, paving, and new building framing and finishing. According to the equipment list provided at the time of this study, impact or vibratory pile driving activities, which can cause excessive vibration, are not expected for the proposed project.

According to Policy EC-2.3 of the City of San José General Plan, a vibration limit of 0.08 in/sec PPV shall be used to minimize the potential for cosmetic damage to sensitive historical structures, and a vibration limit of 0.20 in/sec PPV shall be used to minimize damage at buildings of normal conventional construction. The vibration limits contained in this policy are conservative and designed to provide the ultimate level of protection for existing buildings in San José.

According to the San Jose Historic Resource Inventory, no sensitive historical or older structures are located within 200 feet of the project site. Groundborne vibration levels exceeding the 0.20 in/sec PPV threshold would have the potential to result in a significant vibration impact.

Table 4.13-6 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet.

Table 4.13-6: Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Minimum Distance to Meet 0.2 in/sec PPV (feet)
Clam shovel drop		0.202	26
Hydromill (slurry wall)	in soil	0.008	2
	in rock	0.017	3
Vibratory Roller		0.210	27
Hoe Ram		0.089	13
Large bulldozer		0.089	13
Caisson drilling		0.089	13
Loaded trucks		0.076	11
Jackhammer		0.035	6
Small bulldozer		0.003	<1

Illingworth & Rodkin. *NorthTown Data Center Project Noise and Vibration Assessment*. June 2025. Table 11.

The nearest off-site building adjacent to the site would be the Lumileds building, which is a modern structure located about 40 feet away from the nearest project building. Construction vibration levels at this distance could reach up to 0.125 in/sec PPV.

All other existing buildings in the vicinity of the site are located more than 300 feet away from project construction. Neither cosmetic, minor, or major damage would occur at historical or conventional buildings located 300 feet or more from the project site. At these locations, and in other surrounding areas where vibration would not be expected to cause cosmetic damage, vibration levels may still be perceptible. However, as with any type of construction, this would be anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration (use of jackhammers and other high-power tools). By use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby businesses, perceptible vibration can be kept to a minimum.

Construction of the Project would not generate vibration levels exceeding the 0.2 in/sec PPV threshold at conventional off-site buildings surrounding the project site. **(Less than Significant 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?

San José Mineta International Airport is a public-use airport located approximately 0.4 miles south of the project site. According to the new Airport Master Plan Environmental Impact Report, the Project Site lies within the 65 dBA CNEL and outside the 70 dBA CNEL contour line, which is in the “Generally Acceptable” range of the Santa Clara County CLUP noise compatibility limits for industrial use areas. Therefore, the Project is compatible with the City’s exterior noise standards for aircraft noise. **(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).

The SJ04 Data Center Project would be situated directly adjacent to the southern boundary of the project site at 370 West Trimble Road. This project consists of two four-story data center buildings totaling 630,000 square feet along with associated infrastructure. This project is currently under “Planning Review” stage which means that no information about its construction timing and duration is available at the time of this assessment. The operational noise expected from this project (Table 7 of the technical report¹²²), is not expected to exceed the Municipal Code limits of 60 dBA at the nearest commercially zoned properties to the west and east, nor would it exceed the 70 dBA limit at the nearest industrially zoned properties (Lumileds building and north receptors). In the unlikely scenario where the generators for SJ04 project and the proposed Project are tested at the exact same time and for the same duration, operational noise levels at the Lumileds property line could marginally exceed the 70 dBA Municipal Code limit. For the other nearest commercial or industrial zoned receptors, cumulative operational noise would be expected to meet the 60 and 70 dBA limits for commercial and industrial uses, respectively. The SJ04 project and the proposed Project are designed separately to meet Municipal Code noise limits at the neighboring receiving property lines. Compliance with the Municipal Code on an individual basis would ensure a less-than-significant cumulative operational noise impact.

There are no other known planned or approved projects within 1,000 feet of the proposed project site that would be constructed during the same timeframe as the proposed project. Therefore, the noise-sensitive receptors surrounding the project site would not be subject to other cumulative construction impacts. **(Less than Significant Cumulative Impact)**

¹²² Environmental Systems Design, Inc., *SJC04 Environmental Noise Report – California Energy Commission and San Jose Planning Department*. July 29, 2022.

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.¹²³ The City of San José Housing Element and related land use policies were last updated in June 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.¹²⁴

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 growth forecasts and land use models upon which Plan Bay Area 2050 is based.

¹²³ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed March 10, 2025. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

¹²⁴ Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

City of San José Housing Element 2023-2031

The Housing Element is part of San José's General Plan, a community-based plan that serves as the blueprint for the City's growth. The Housing Element identifies the city's housing needs and opportunities and establishes goals and strategies to inform housing decisions. The plan is intended to achieve the construction of 62,200 units of residential development by 2031 with a variety of household types serving all income levels. The City has an expected population growth of 360,000 residents by 2040.

4.14.1.2 *Existing Conditions*

The population of San José was estimated to be approximately 969,491 in January 2024 with an average of 2.86 persons per household.¹²⁵ The City currently has a total population of 969,491.¹²⁶ Full build out of the General Plan includes 120,000 new dwelling units and 470,000 new jobs by 2035.¹²⁷ Development approved under the General Plan is projected to increase the City's residential population to 1,313,811.¹²⁸

The City currently has a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident), but this trend is projected to reverse with full build out under the General Plan. The General Plan assumptions, as amended in the first Four-Year Review in 2016, envision a Jobs/Employee Resident ratio of 1.1/1 or 382,200 new jobs by 2040.¹²⁹ To meet the current and projected housing needs in the City, the 2040 General Plan identifies areas for mixed-use and residential development to accommodate 120,000 new dwelling units by 2040.¹³⁰

The Project Site is vacant and contains no housing. Surrounding uses consist of industrial and office uses. The Project Site is located in the North San José area; expected growth in this area includes 26.7 million square feet of new industrial/office/R&D uses, 1.7 million square feet of new neighborhood serving commercial uses, and the addition of 32,000 new residential units.

4.14.2 Impact Discussion

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

¹²⁵ State of California, Department of Finance. "E-5 Population and Housing Estimate for Cities, Counties, and the State – January 1, 2021-2024." May 2024. Accessed March 21, 2025. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/>

¹²⁶ Ibid.

¹²⁷ City of San José. *Envision San José 2040 General Plan Integrated Final Program Environmental Impact Report*. SCH: 2009072096. September 2011. Page 770.

¹²⁸ Ibid. Table 3.1 4-4.

¹²⁹ City of San José. *Addendum to the Envision San José 2040 General Plan Final Program Environmental Impact Report and Supplemental Program Environmental Impact Report*. November 2016. Page 8.

¹³⁰ Ibid. Page 11.

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

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 Project would construct two data center buildings, a utility substation, generator equipment yard, surface parking, landscaping, trail improvements, access improvements, utility pipeline connections, and off-site infrastructure improvements in the right-of-way of West Trimble Road and Orchard Parkway. The Project would be a low employment-generating use. Therefore, approval of the Project would not substantially increase jobs in the City. The Project would result in a temporary increase in jobs during construction; however, 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 or substantially alter the City's job/housing ratio and would, therefore, result in a 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 and Intersection Improvement Area do not include residents or housing units. 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 proposed in San José could potentially remove housing and/or facilitate unplanned growth. However, the Housing Element to the General Plan incorporates a land use vision for the planned build out to 2040, which would utilize existing areas within the City's Urban Growth Boundary to

increase residential development. 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 Final Program EIR identified a significant unavoidable impact related to a project jobs/housing imbalance with full buildout of the General Plan.¹³¹ The Project would be a low employment-generating use. Approval of the Project would be a minor increment of the overall jobs represented by the cumulative projects. For this reason, the jobs added by the Project would not make a cumulatively considerable contribution to a worsening of the jobs/housing imbalance.
(Less than Significant Cumulative Impact)

¹³¹ City of San José. *Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan*. SCH# 2009072096. September 2011. Page 776.

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

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes,

connector trail routes, and historic trails. The nearest Santa Clara County trail is the Guadalupe River Trail, a sub-regional trail, adjacent to the Project Site.¹³²

Envision San José 2040 General Plan

The following General Plan policies are specific to public services and are applicable to the proposed project.

Policies	Description
ES-3.9	Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publicly-visible and accessible spaces.
ES-3.11	Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.
PR-2.4	To ensure that residents of a new project and existing residents in the area benefit from new amenities, spend Park Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) fees for neighborhood serving elements (such as playgrounds/tot-lots, basketball courts, etc.) within a ¼ mile radius of the project site that generates the funds.

Parkland Dedication Ordinance and Park Impact Ordinance

The City of San José has adopted the Parkland Dedication Ordinance (PDO, Municipal Code Chapter 19.38) and Park Impact Ordinance (PIO, Municipal Code Chapter 14.25), requiring new residential development to either dedicate sufficient land to serve new residents or pay fees to offset the increased costs of providing new park facilities for new development. Under the PDO and PIO, a project can satisfy half of its total parkland obligation by providing private recreational facilities on-site. The acreage of parkland required is based on the minimum acreage dedication formula outlined in the PDO.

ActivateSJ Strategic Plan (2020-2040)

The ActivateSJ Strategic Plan is the latest 20-year strategic plan for the City of San José’s Department of Parks, Recreation, and Neighborhood Services.¹³³ This plan does not replace the Greenprint 2009 update but instead is a complement to the Greenprint document and focuses more on the daily operations of the Department of Parks, Recreation, and Neighborhood Services. ActivateSJ includes key plan outcomes to support the following guiding principles: stewardship, nature, equity and access, identify, and public life. These guiding principles also align with the specific goals and policies of the General Plan.

¹³² Santa Clara County Parks. “Countywide Trails Master Plan Map.” December 2024. Accessed June 26, 2025. https://files.santaclaracounty.gov/exjcpb1516/2024-11/countywidetrailsmasterplanmap_december2024.pdf?VersionId=wOJ1da1kkENeH.t0VhkDQQIOyh2gPKSJ

¹³³ City of San José. “ACTIVATESJ Strategic Plan (2020-2040).” 2020. Accessed March 27 2025. <https://www.sanjoseca.gov/home/showpublisheddocument/43503/637178743945470000>

4.15.1.2 Existing Conditions

Fire Protection Services

Fire protection services for the Project Site and Intersection Improvement Area are provided by the San José Fire Department, which is one of the busiest fire departments in the county with the fire department responding to approximately 109,000 service calls per year and serving over 1.2 million residents.¹³⁴ The San José Fire Department consists of 34 stations distributed throughout the City. Per General Plan Policy E.S-3.1, the response time goal for fire protection is eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.

The closest fire station is Station 29, located at 199 Innovation Drive, which is approximately two miles north of the Project Site.

Police Protection Services

Police protection services are provided by the City of San José Police Department. The San José Police Department employs approximately 1,700 employees including both sworn and non-sworn, who are assigned to one of the 70 specialized units and assignments in the department.¹³⁵ Per General Plan Policy E.S-3.1, a police protection service goal is six minutes or less for 60 percent of all Priority 1 (emergency) calls and 11 minutes or less for 60 percent of all Priority 2 (non-emergency) calls. The police headquarters is located at 201 West Mission Street, approximately four miles southeast of the Project Site.

Schools

The Project Site and Intersection Improvement Area are located within the Santa Clara Unified School District. Nearby schools include Montague Elementary School (approximately 0.9 miles northwest of the site), North Valley Baptist Schools (approximately 1.2 miles northwest of the site), and Kathryn Hughes Elementary School (approximately 2.4 miles northwest of the site).

Parks

The City's Department of Parks, Recreation, and Neighborhood Services is responsible for the development, operation, and maintenance of all City park facilities. The City operates and maintains regional and neighborhood/community-serving parkland, including 206 parks, 50 community

¹³⁴ City of San José. "About SJFD." Accessed March 27, 2025. <https://www.sanjoseca.gov/your-government/departments-offices/fire-department/about-sjfd#:~:text=The%20San%20Jos%C3%A9%20Fire%20Department,areas%20of%20Santa%20Clara%20County>.

¹³⁵ San José Police Department. "Department Information." Accessed March 27, 2025. <https://www.sjpd.org/about-us/inside-sjpd/departments-information>.

centers, and over 61 miles of trails.¹³⁶ The nearest recreational facility is the Guadalupe River Trail adjacent to the Project Site.¹³⁷

Libraries and Community Centers

The City of San José is served by the San José Public Library System. The San José Public Library System consists of one main library (Dr. Martin Luther King Jr.) and 25 branch libraries. The nearest library the Northside Branch Library, located approximately 1.1 miles to the north in the City of Santa Clara. The nearest City of San José library is the Alviso Branch Library, located approximately 3.5 miles to the north.

The City of San José operates 51 community centers within the City limits. The nearest community center is the Grace Community Center, approximately three miles to the southeast.

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:

- a) Fire protection?
- b) Police protection?
- c) Schools?
- d) Parks?
- e) Other public facilities?

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?
-

¹³⁶ Ibid. Page 6.

¹³⁷ City of San José. "San José Parks Finder." Accessed March 21, 2025.

<https://csj.maps.arcgis.com/apps/webappviewer/index.html?id=93ae7909fe8f4b758daa5a73baa895c3>

The Project is an infill project located within an urbanized part of San José that is already served by the San José Fire Department. The proposed Project would also be constructed to meet the City's Municipal and Fire Codes which would ensure the Project would be adequately served by the existing fire services. While the Project may result in an incremental increase in the need for fire protection services by the with increased building area and employment, the Project would not be substantial enough to warrant modification of existing or construction of new fire service facilities beyond what is projected in the General Plan. In the event that new facilities are required as a result of cumulative growth in the area, the City would conduct additional environmental analysis, based on the location and details of any proposed new public facilities, to determine if significant environmental impacts would occur, and devise adequate measure to mitigate any significant impacts. For these reasons, the Project would not require the construction of new or expanded fire facilities and impacts would be less than significant. **(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 Project is an infill project located within an urbanized part of San José that is already served by the San José Police Department. The Project may result in an incremental increase in the need for police services associated with increased building area and employment. However, the Project would not require the construction of new facilities or stations beyond what was identified in the General Plan Final Program EIR in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. Also, the construction of any expanded police department facilities would require environmental review and would not be anticipated to result in significant adverse environmental impacts. In addition, the San José Police Department would review the final site design, including proposed landscaping, access, and lighting, to ensure that the Project provides adequate safety and security measures. For these reasons, the Project would have less than significant impacts on 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 proposes a data center facility that would not generate new residents or future students. Moreover, the Project would be required to pay applicable school impact fees pursuant to SB 50. The Project would not require new or expanded school facilities, the construction of which could cause environmental impacts. **(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 Project proposes a data center facility that would not generate new residents. Some employees at the Project Site may visit local parks, such as the Guadalupe River Trail; however, this usage would represent a negligible increase and would not create the need for any new facilities or adversely impact the physical condition of existing facilities. **(No 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 proposes a data center facility that would not generate new residents. Some employees at the Project Site may visit library facilities; however, this would be a negligible use 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 San José. All cumulative projects would be required to be built in conformance with then-current Building and Fire Codes and public safety requirements in the General Plan. The Project would not develop residences, and therefore, would not result in a cumulatively considerable contribution to a cumulative school, library, or park and recreational facility impacts. For this reason, the cumulative projects would result in a less than significant cumulative impact to police, fire, and recreational 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.

Local

Envision San José 2040 General Plan

The following General Plan policies are specific to recreational resources and are applicable to the proposed Project.

Policy	Description
PR-2.4	To ensure that residents of a new project and existing residents in the area benefit from new amenities, spend Park Dedication Ordinance and Park Impact Ordinance fees for neighborhood serving elements (such as playgrounds/tot-lots, basketball courts, etc.) within a ¾ mile radius of the project site that generates the funds.
PR-2.5	Spend, as appropriate, PDO/PIO fees for community serving elements (Such as soccer fields, community gardens, community centers, etc.) within a 3-mile radius of the residential development that generates the PDO/PIO funds.

Greenprint

The Greenprint is a strategic plan to guide the City's expansion of parks, recreation facilities, and community services. The plan was first adopted by City Council in 2000 then updated in 2009.¹³⁸ The Greenprint contains strategies to support the overall mission of providing healthy communities through people, parks, and programs. The Greenprint identifies areas of the City that are underserved by park and recreation facilities and includes policies and strategies to correct those deficiencies. The General Plan incorporated the Greenprint 2009 strategies.

¹³⁸ City of San José. "Greenprint 2009 Update." December 8, 2009. Accessed May 22, 2024. <https://www.sanjoseca.gov/your-government/departments-offices/parks-recreation-neighborhood-services/general-information/policies-reports/residents>

ActivateSJ Strategic Plan (2020-2040)

The ActivateSJ Strategic Plan is the latest 20-year strategic plan for the City of San José's Department of Parks, Recreation, and Neighborhood Services.¹³⁹ This plan does not replace the Greenprint 2009 update but instead is a complement to the Greenprint document and focuses more on the daily operations of the Department of Parks, Recreation, and Neighborhood Services. ActivateSJ includes key plan outcomes to support the following guiding principles: stewardship, nature, equity and access, identify, and public life. These guiding principles also align with the specific goals and policies of the General Plan.

4.16.1.2 *Existing Conditions*

The City's Department of Parks, Recreation, and Neighborhood Services is responsible for the development, operation, and maintenance of all City park facilities. The City operates and maintains regional and neighborhood/community-serving parkland, including 206 parks, 50 community centers, and over 61 miles of trails.¹⁴⁰

The nearest recreational facility is the Guadalupe River Trail adjacent to the Project Site.¹⁴¹

4.16.2 Impact Discussion

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

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

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?
-

The Project proposes to develop industrial uses (e.g., data centers, a substation, and associated equipment) with no residential development included. While employees of the Project may utilize

¹³⁹ City of San José. "ACTIVATESJ Strategic Plan (2020-2040)." 2020. Accessed March 21, 2025. Page 2.

<https://www.sanjoseca.gov/home/showpublisheddocument/43503/637178743945470000>

¹⁴⁰ Ibid. Page 6.

¹⁴¹ City of San José. "San José Parks Finder." Accessed March 21, 2025.

<https://csj.maps.arcgis.com/apps/webappviewer/index.html?id=93ae7909fe8f4b758daa5a73baa895c3>

parks and recreational facilities in the area, such as the Guadalupe River Trail, the Project would not generate demand for neighborhood or regional park facilities, such that substantial physical deterioration of these facilities would occur or be accelerated. **(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 Project would not include recreational facilities. Some employees may use nearby parks and recreational facilities; however, this would not represent a substantial increase and would not require the construction or expansion of recreational facilities. **(No 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 could increase the use of recreational facilities, such as neighborhood and regional parks and community centers, to the point of disrepair. In the 2040 Envision San José General Plan Program EIR (as amended), the City identified that with expected population growth through 2035, additional parks and community centers would be required to accommodate the increase in population.¹⁴² Existing City policies and regulations, such as the Parkland Dedication Ordinance and Parkland Impact Ordinance, 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)**

¹⁴² City of San José. *Envision San José 2040 General Plan Draft Program EIR*. June 2011. Page 619.

4.17 Transportation

The following discussion is based, in part, on a Transportation Analysis prepared by Hexagon Transportation Consultants, Inc. The Transportation Analysis, dated June 2025, is included in this SPPE Application as Appendix N. The Transportation Analysis recommends mitigation measures to reduce the Projects potential transportation impacts. The Applicant has incorporated these measures into PDMs in this application.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (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 the 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.

Regional and Local

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara 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 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

Congestion Management Program

VTA 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. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Transportation Analysis Policy (City Council Policy 5-1)

As established in City Council Policy 5-1, Transportation Analysis Policy, the City of San José uses VMT as the metric to assess transportation impacts from new development. According to the policy, residential project's transportation impact would be less than significant if the project VMT is 15 percent or more below the existing average citywide VMT per capita. Screening criteria have been established to determine which projects require a detailed VMT analysis. If a project meets the relevant screening criteria, it is considered to have a less than significant VMT impact.

If a project's VMT does not meet the established thresholds, mitigation measures would be required, where feasible. The policy also requires preparation of a Local Transportation Analysis to analyze non-CEQA transportation issues, including local transportation operations, intersection level of service, site access and circulation, and neighborhood transportation issues such as pedestrian and bicycle access and recommend transportation improvements. The VMT policy does not negate Area Development policies and Transportation Development policies approved prior to adoption of Policy 5-1; however, it does negate the City's Protected Intersection policy as defined in Policy 5-3.

San José Better Bike Plan 2025

The San José Better Bike Plan 2025 defines the City's vision to make bicycling safe and convenient for all ages and abilities in San José. The plan is organized around three primary goals: 1) increasing safety for bicyclists in the City, 2) increasing the number of trips made by bike in San José, and 3) ensuring that the plan serves historically underserved communities.¹⁴³ The plan outlines existing conditions, describes the planned bicycle network, and offers details on the implementation strategy required to realize the planned network. The Better Bike Plan 2025 defines clear goals to build off of the successes of Bike Plan 2020.

Envision San José 2040 General Plan

The General Plan includes the following transportation policies applicable to the proposed project.

¹⁴³ City of San José. San José Better Bike Plan 2025. October 2020. Accessed May 22, 2024. <https://www.sanjoseca.gov/home/showpublisheddocument/68962/637477999451470000>.

Policy	Description
TR-1.1	Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).
TR-1.2	Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.
TR-1.4	Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand. Development proposals shall be reviewed for their impacts on all transportation modes through the study of Vehicle Miles Traveled (VMT), Envision San José 2040 General Plan policies, and other measures enumerated in the City Council Transportation Analysis Policy and its Local Transportation Analysis. Projects shall fund or construct proportional fair share mitigations and improvements to address their impacts on the transportation systems. The City Council may consider adoption of a statement of overriding considerations, as part of an EIR, for projects unable to mitigate their VMT impacts to a less than significant level. At the discretion of the City Council, based on CEQA Guidelines Section 15021, projects that include overriding benefits, in accordance with Public Resources Code Section 21081 and are consistent with the General Plan and the Transportation Analysis Policy 5-1 may be considered for approval. The City Council will only consider a statement of overriding considerations for (i) market-rate housing located within General Plan Urban Villages; (ii) commercial or industrial projects; and (iii) 100% deed-restricted affordable housing as defined in General Plan Policy IP-5.12. Such projects shall fund or construct multimodal improvements, which may include improvements to transit, bicycle, or pedestrian facilities, consistent with the City Council Transportation Analysis Policy 5-1. Area Development Policy. An "area development policy" may be adopted by the City Council to establish special transportation standards that identifies development impacts and mitigation measures for a specific geographic area. These policies may take other names or forms to accomplish the same purpose.
TR-1.6	Require that public street improvements provide safe access for motorists and pedestrians along development frontages per current City design standards.
TR-2.8	Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
TR-3.3	As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute towards transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.
TR-5.3	Development projects' effects on the transportation network will be evaluated during the entitlement process and will be required to fund or construct improvements in proportion to their impacts on the transportation system. Improvements will prioritize multimodal improvements that reduce VMT over automobile network improvements.
TR-8.4	Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.

Policy	Description
TR-8.6	Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive TDM program, or developments located near major transit hubs or within Villages and Corridors and other growth areas.
TR-8.9	Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional access to the Project Site is provided via United States Highway 101 (US 101) and Interstate 880 (I-880). Local access to the site is provided by Trimble Road, North First Street, Zanker Road, Charcot Avenue, Orchard Parkway, and Component Drive. These facilities are described below.

United States Highway 101

US 101 is a north/south freeway with six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes through most of Santa Clara and San José. US 101 extends northward through San Francisco and southward through Gilroy. Access to and from the Project Site is provided via an interchange at Trimble Road.

Interstate 880

I-880 is a north/south freeway providing regional access from East Bay cities to San José, where it ultimately becomes SR 17 and extends into Santa Cruz. Within the project vicinity, I-880 provides six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Access to the Project Site from I-880 is provided via an interchange at Montague Expressway.

Trimble Road

Trimble Road is a six-lane arterial extending southward from Montague Expressway to De La Cruz Boulevard near US 101. Direct access to the Project Site from Trimble Road is provided via a right-in/right-out driveway and a full-access signalized driveway.

North First Street

First Street is a north-south roadway that extends from the north San José area through downtown San José. In the vicinity of the Project Site, First Street is a four-lane roadway. First Street, in conjunction with Brokaw Road, provides full access to US 101.

Zanker Road

Zanker Road is four-lane arterial that extends from US 101 northward just north of SR 237 where it transitions to Los Esteros Road. Zanker Road intersects with Charcot Avenue and provides a parallel route to First Street in the study area.

Charcot Avenue

Charcot Avenue is a two- to four-lane roadway that begins at the US 101/SR 87 junction as the SR 87 off- and on ramps to/from North First Street and runs eastward to O'Toole Avenue, just west of I-880, where it terminates. West of North First Street, Charcot Avenue is a four-lane roadway that provides direct access to SR 87, while the segment east of North First Street functions as a two-lane collector street providing access to adjacent employment areas.

Orchard Parkway

Orchard Parkway is two-lane north-south roadway that begins at First Street just south of Tasman Drive and extends south to Charcot Avenue, where it transitions to O'Nel Drive.

Component Drive

Component Drive is a two-lane east-west roadway that runs along the southern project frontage and extends from just west of Orchard Parkway to Zanker Road. Component Drive has a posted speed limit of 35 mph.

Bicycle and Pedestrian Facilities

There are several bike paths and several roadways with striped bike lanes in the vicinity of the Project Site. Bicycle facilities are divided into four classes of relative significance. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Class III bikeways are bike routes and only have signs and/or Sharrows (shared lane markings) to help guide bicyclists on recommended routes to certain locations. Class IV bikeways are on-street bicycle facilities that incorporate physical barriers (e.g., raised curbs, flexible bollards, vehicle parking, grade separation, etc.) to separate bicycles from the flow of vehicular traffic. There are no Class IV bikeways in the Project vicinity. Class II striped bike lanes are provided on the following roadways:

- North First Street - Between Brokaw Road and Alviso
- Trimble Road - Between Seaboard Avenue (just east of US 101) and Montague Expressway
- Orchard Parkway - Along its entirety between Charcot Avenue and North First Street
- Charcot Avenue - Between Orchard Parkway and Zanker Road

The Guadalupe River multi-use trail system runs through the City of San José along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This shared trail system runs adjacent to SR 87 near the Project Site and can be accessed via Trimble Road.

Pedestrian facilities in the Project vicinity consist primarily of sidewalks along nearly all the surrounding streets, including the Project frontages on Trimble Road and Orchard Parkway.

Transit Services

Existing transit services to the study area are provided by the VTA. The site is not served directly by any bus routes. The nearest bus service to the Project Site is provided by local bus route 20, which operates along Montague Expressway, First Street, and Plumeria Drive. Route 20 provides services between the Milpitas Bay Area Rapid Transit (BART) Station and Sunnyvale Transit Center with approximately 30-minute headways during the commute periods. The nearest route 20 bus stops are located near the intersection of First Street and Plumeria Drive, approximately one mile from the Project Site.

In addition to the bus routes described above, the Project Site is served by the VTA's light rail system. The light rail system extends 42.2 miles from south San José through downtown to the northern areas of San José, Santa Clara, Milpitas, Mountain View, and Sunnyvale. The Component light rail station is located at the North First Street and Component Drive intersection, approximately half a mile from the Project Site. The Component station is served by the Santa Teresa-Baypointe light rail Line (Blue Line) and the Winchester-Old Ironsides Line (Green Line).

4.17.2 Impact Discussion

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

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

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

Although data centers are a low employment use, the proposed Project would bring new jobs to the area and is anticipated to increase the use of transit facilities in the area, including the nearby Component LRT station. The General Plan EIR concluded that upon implementation of the General Plan, transit ridership throughout the City would increase. The proposed Project would encourage the use of transit facilities by bringing new jobs to a Planned Growth Area of the City with accessible local and regional transit connections, and by including measures to reduce vehicle trips to and from the site (refer to PDM TRN-1). The Project Site is located within walking distance (0.8 mile) of the Component station. The proposed Project would not generate many transit riders but any increased transit demand could be accommodated by the currently available ridership capacity of the VTA light rail service. Additionally, the Project would not remove, or inhibit access to, any public transit facilities. For these reasons, the proposed Project would not conflict with a program, plan, ordinance, or policy regarding transit facilities.

Bicycle and Pedestrian Facilities

The proposed Project would develop data center buildings and associated facilities. The Project would be in proximity to the Guadalupe River trail and Class II bikeways on Trimble Road and Orchard Parkway. The proposed Project would not remove, or inhibit access to, any existing or planned bicycle facilities. The Project would result in the construction of a Class IV protected bikeway along the Project's frontage with West Trimble Road.

The Project would include pedestrian pathways that would circulate throughout the Project Site and connect to existing sidewalks along West Trimble Road and Orchard Parkway. The Project would not inhibit pedestrian flow through the area by reducing sidewalk width or eliminating sidewalks to accommodate vehicular travel. The proposed Project would not conflict with a program, plan, ordinance or policy regarding bicycle and/or pedestrian facilities. **(Less than Significant Impact)**

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

As described in Section 4.17.1.1 Regulatory Framework, the City's adopted Transportation Policy (City Council Policy 5-1) sets forth the thresholds of significance and methodology for analyzing the VMT impacts of development projects. The methodology used to determine existing and project VMT and the analysis of the Project's VMT impacts are described below.

VMT Evaluation Methodology

The effects of the proposed Project on VMT were evaluated using the methodology outlined in the City's Transportation Analysis Handbook. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district or planned growth area with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity. When assessing an office or industrial project, the project's VMT is divided by the number of employees.

The City of San José's Transportation Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City's Transportation Policy establishes screening criteria for various land uses; projects which meet the screening criteria would not require a detailed, quantitative assessment of VMT. The City's screening criteria for an industrial project is 30,000 square feet of total gross floor area or less. The proposed project would construct approximately 414,000 square feet of data center use, which would generate traffic equivalent to approximately 85,000 square feet of industrial space. Therefore, the Project would exceed the screening criterion and a complete VMT analysis is required.

VMT Evaluation Tool

To determine whether a project would result in transportation impacts related to VMT, the City has developed the San José VMT Evaluation Tool to streamline the analysis for development projects. Based on the APN of a project, the VMT Evaluation Tool identifies the existing average VMT per capita and employee for the project area. Using the following information, the VMT evaluation tool calculates the project generated VMT: project location, type of development, project description, and proposed trip reduction measures.

Projects located in areas where the existing VMT is greater than the established threshold are referred to as being "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible. The VMT evaluation tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. There are four strategy tiers whose effects on VMT can be calculated with the VMT evaluation tool:

1. Project characteristics (e.g., density, diversity of uses, design, and affordability of housing) that encourage walking, biking and transit uses;

2. Multimodal network improvements that increase accessibility for transit users, bicyclists, and pedestrians;
3. Parking measures that discourage personal motorized vehicle-trips; and
4. Transportation demand management (TDM) measures that provide incentives and services to encourage alternatives to personal motorized vehicle-trips.

Thresholds of Significance

The thresholds of significance for employment uses set forth in the Transportation Analysis Policy are based on the existing regional average VMT per employee. The existing regional average VMT level for industrial employment uses is 16.53 VMT per employee. Projects which exceed this VMT level would result in a significant VMT impact pursuant with the City's policy.

Project-Level VMT Analysis

Based on the results of the VMT Evaluation tool, the Project VMT would be 17.88 VMT per employee. The project generated VMT would exceed the threshold of 16.53 VMT per employee. The following measure is included in the project as an Applicant Proposed PDM to reduce VMT to an acceptable level.

PDM TRN-1: Transportation Demand Management Plan. Prior to the issuance of building occupancy permits, the Project Applicant shall prepare and submit a final Transportation Demand Management (TDM) plan with measures to reduce trips associated with the proposed project. The final TDM Plan shall be submitted to the Director of the Department of Planning, Building, and Code Enforcement and the Director of the Department of Transportation or their designees. The TDM Plan shall include the following measures:

- Provide Commute Trip Reduction Marketing/Education: The project shall implement marketing/educational campaigns for all employees that promote the use of transit, shared rides, and travel through active modes. Strategies may include the incorporation of alternative commute options into new employee orientations, event promotions, and publications.
- Provide Ride Sharing Program: The project shall provide ride-sharing programs by facilitating carpool for interested future employees, achieving at least 10 percent employee participation.

The TDM Plan shall include a trip cap sufficient to reduce trips below the 16.53 VMT per employee threshold for VMT monitoring purposes. The trip cap shall be prepared by a traffic engineer. The monitoring shall be based on annual trip generation counts that demonstrate the vehicle trips generated by the project are within 10 percent of an established peak hour trip cap that is prepared by a

traffic engineer. The annual trip monitoring reports shall be submitted that demonstrate that project-generated VMT is below the significance threshold. If the annual trip monitoring report finds that the project is exceeding the established trip cap, the project shall be required to submit a follow-up report that demonstrates compliance with the trip cap requirements within a period not to exceed six months.

Implementation of the PDM described above would reduce the project VMT generated to 16.23 per employee, which is below the significance threshold of 16.53 per employee. Impacts would therefore be less than significant. **(Less than Significant Impact)**

-
- 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)?
-

Geometric Design

Sight Distance

Access to the Data Center North area of the site is proposed to be provided via a right-in-right-out driveway along Orchard Parkway, just south of Trimble Road and the existing signalized site driveway along Orchard Parkway. Access to the Data Center West area of the site is proposed to be provided via a right-in-right-out driveway along Trimble Road and the existing signalized driveway along Orchard Parkway.

The minimum acceptable sight distance is typically based on American Association of State Highway and Transportation Officials (AASHTO) stopping sight distance, which varies depending on roadway speeds. Trimble Road and Orchard Parkway have posted speed limits of 40 and 35 miles per hour (mph), respectively. The AASHTO stopping sight distances for these speeds are 305 feet and 250 feet. Therefore, drivers exiting the project driveways must have a clear view of 250 feet to the north along Orchard Parkway and 305 feet to the west along Trimble Road. Both roads currently prohibit on-street parking along the project frontages.

Field observations indicate that the project driveway along Trimble Road is located along a straight segment of Trimble Road, ensuring that adequate stopping sight distances would be available at this driveway to allow vehicles to enter and exit the site safely.

The project proposes an unsignalized right-in-right-out driveway along Orchard Parkway located approximately 300 feet south of the signalized project access driveway. It is located along a straight segment of Orchard Parkway and adequate sight distance to the north is provided to and through the signalized project access, ensuring that adequate stopping sight distances should be available at this driveway to allow vehicles to enter and exit the site safely.

On-Site Circulation

To provide adequate on-site circulation for all vehicle types, including larger emergency vehicles and garbage trucks, the design of all internal roadways shall adhere to the City of San José design standards and guidelines. The design of the Project Site must include adequate corner radii along all internal roadways/drive aisles, as well as driveway width, drive aisle width, parking dimensions, and signage that satisfies the design standards. By designing the site in accordance with the City's design standards and guidelines, the project would not substantially increase hazards related to on-site vehicular circulation. As described in the Transportation Analysis, the on-site circulation would be adequate for passenger vehicles and large trucks. For these reasons, there would be no significant impacts related to on-site circulation.

Land Use Compatibility

The proposed data center would be located in an area of the City that is developed with similar land uses. The Project Site is located immediately adjacent to an existing industrial facility (Lumileds). To the east of the Project Site, there is a vacant lot and an office campus. A vacant lot planned for a future data center is located south of the Project Site. Towards the west is the Guadalupe River and trail. None of the adjacent uses would preclude the proposed use of the Project Site, and the Project's proximity to these land uses would not result in substantial hazards. Therefore, the Project would not result in a significant impact due to land use incompatibilities.

(Less than Significant Impact)

d) Would the project result in inadequate emergency access?

The City of San José Fire Department requires that all portions of the buildings be within 150 feet of a fire access road and requires a minimum of six feet of clearance from the property line along all sides of the buildings. Adequate clearance would be provided around the perimeters of the buildings and all areas of the proposed buildings would be within 150 feet of a fire access road. The Project driveway width and drive aisles would also accommodate emergency vehicles. The proposed Project would also be required to comply with the applicable City of San José policies and ordinances requiring adequate emergency access for the Project Site. For these reasons, the proposed Project would not interfere with the emergency response to the Project vicinity. Therefore, the proposed Project would result in a less than significant impact to emergency access to and around the Project Site. **(Less than Significant Impact)**

4.17.2.2 *Cumulative Impacts*

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

Projects must demonstrate consistency with the Envision San José 2040 General Plan to address cumulative impacts. Consistency with the City's General Plan is based on the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required per the City's Transportation Analysis Handbook.

The Transportation Analysis determined that the Project is consistent with the applicable General Plan goals and policies. The Project would be consistent with the zoning districts in which the site is located, the proposed employment density would be consistent with the General Plan Land Use designation for the site. The Project would be consistent with the City of San José Better Bike Plan 2025 due to the construction of a Class IV protected bikeway along the project's frontage on West Trimble Road. The Project also incorporates a PDM TRN-1 to reduce project-generated VMT below the City's threshold of significance. The proposed Project would not result in a cumulatively considerable contribution to a significant cumulative 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*

Native Americans occupied Santa Clara Valley and the greater Bay Area for more than 5,000 years. The exact time period of the Ohlone (originally referred to as Costanoan) migration into the Bay Area is debated by scholars. Dates of the migration range between 3000 B.C. and 500 A.D. Regardless of the actual time frame of their initial occupation of the Bay Area and, in particular, Santa Clara Valley, it is known that the Ohlone had a well-established population of approximately 7,000 to 11,000 people with a territory that ranged from the San Francisco Peninsula and the East Bay, south through the Santa Clara Valley and down to Monterey and San Juan Bautista.

The Ohlone people were hunter/gatherers focused on hunting, fishing, and collecting seasonal plant and animal resources, including tidal and marine resources from San Francisco Bay. The customary way of living, or lifeway, of the Costanoan/Ohlone people disappeared by about 1810 due to disruption by introduced diseases, a declining birth rate, and the impact of the California mission system established by the Spanish in the area beginning in 1777.

The Project Site consists of an approximately 28.5-acre site in North San José, as well as the Intersection Improvement Area. As described in Section 4.5 Cultural Resources, an archaeological literature search was prepared for the site to identify any potential cultural resources present on-site or in adjacent areas. The literature search did not identify any cultural resource within the Project Site.

The NAHC responded to Sacred Lands File request on January 26, 2025 noting that the results of the request were negative.¹⁴⁴ No tribal cultural features, including sites, features, places, cultural landscapes or sacred places were identified on-site.

Native American Outreach

AB 52 requires lead agencies to complete formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. Chronicle Heritage, the Project's qualified archaeologists, notified Tribes of the Project in letters on March 5, 2025. The following list summarizes the correspondences received during this outreach process:

- On March 5, 2025, Chairperson of the Confederated Villages of Lisjan Nation Corrina Gould responded with no concerns regarding the Project's potential effects on cultural resources known to the Lisjan Nation.
- On March 5, 2025, Chairperson Andrew Galvan responded to outreach to inquire about the Project's archaeological recommendations.
- On March 6, 2025 Administrative Assistant Tracie Carrasco (for Tamien Nation) responded and attached the Tamien Nation's official record search request form.
- On March 17, 2025, Councilmember/Most Likely Descendant Tribal Representative of the Muwekma Ohlone Tribe of the San Francisco Bay Area Richard Massiatt responded to Chronicle Heritage's outreach with interest in the Project and to offer consultation services if they become necessary.
- On April 1, 2025, Chairperson of the Amah Mutsun Tribal Band of Mission San Juan Bautista Shelby Brown responded requesting a copy of the Project's record search results in order to determine whether Native American monitoring would be required.
- On April 27, 2025, Muwekma Ohlone Tribal Archaeologist Alan Leventhal formally requested tribal consultation for the project as the Project area is in proximity to the Guadalupe River (Thámien Rúmmey), and several identified ancestral heritage sites within the region.

¹⁴⁴ Chronicle Heritage. *Cultural Resource Technical Report for the NorthTown Data Center Project*. June 2025. Page 38.

- o Alan Leventhal also requested a copy of the CHRIS records search results and recommends that Muwekma Ohlone Tribal monitors be hired to work alongside any CRM firm personnel that are hired for this project.

It is assumed in this SPPE Application that the Commission, as the Lead Agency, will conduct Tribal Consultation pursuant to the requirements of AB 52 during the EIR preparation process.

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:

- a) 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)?
- b) 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)?
-

While the NAHC Sacred Lands File record search results were negative and there are no known tribal cultural resources on-site that are listed or eligible for listing in the California Register of the City of San José Historic Resource Inventory, the Project Site has moderate to high sensitivity for archaeological resources (including tribal cultural resources). 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.

Consistent with General Plan Policies ER-10.2 and ER-10.3, standard conditions and mitigation measures would be applied to the Project Site which would avoid any significant impacts to tribal cultural resources discovered during development of the site. As identified in Section 4.5 Cultural Resources, the Project would implement PDM CUL-1.1 through PDM CUL-1.3 which would require a Native American monitor be present on-site during ground-disturbance of native soils and implementation of appropriate treatment measures should any resources be discovered. Therefore, the proposed project would have a less than significant impact on tribal cultural resources. **(Less than Significant Impact)**

-
- 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 above under checklist question a), the Project Site has moderate to high sensitivity for buried Native American archaeological deposits and buried archaeological deposits. No specific tribal cultural resources were identified during the outreach process or pedestrian survey of the Project Site. With the implementation of PDMs CUL-1.1, CUL-1.2, CUL-1.3, and CUL-2 the proposed project would not result in 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)**

4.18.2.2 *Cumulative Impacts*

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

The geographic study area for cumulative impacts to TCRs is the surrounding area (within 1,000 feet of the project site). No tribal cultural features, including sites, features, places, cultural landscapes or sacred places have been identified at the site based on available information. However, the Project Site has moderate to high potential for discovering cultural resources, which includes TCRs. With PDMs CUL-1.1, CUL-1.2, CUL-1.3, and CUL-2, any unanticipated TCRs finds would be handled properly by a qualified archaeologist and Native American tribe. As a result, the project would have a less than significant cumulative impact on TCRs. **(No Cumulative Impact)**

4.19 Utilities and Service Systems

The following discussion is based on a Water Supply Assessment prepared by Todd Groundwater dated May 2025. A copy of the report is included as Appendix O of this SPPE Application.¹⁴⁵

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 San José Municipal Water adopted its most recent UWMP in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the California Integrated Waste Management Board (CIWMB), 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) by 2000 and thereafter. 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.

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 Water Supply Assessment (WSA) containing detailed information regarding water availability to be provided to the decision-makers prior to approval of specified large development

¹⁴⁵ The WSA will ultimately be adopted by the San Jose Municipal Water Board of Directors, which is the San Jose City Council. The WSA is pending adoption and the final adopted WSA will be submitted to the Commission under a separate cover.

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 (or other lead agency) 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.

Assembly Bill 1826

AB 1826 sets forth the requirements of the statewide mandatory commercial organics recycling program for businesses and multi-family dwellings with five or more units that generate two or more cubic yards of commercial solid waste per week. AB 1826 sets a statewide goal for 50 percent reduction in organic waste disposal by the year 2020.

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 Waste Reduction Goals” in August 2020 (revised November 2020), which recommended maintaining the disposal reduction targets set forth in SB 1383.¹⁴⁶

¹⁴⁶ CalRecycle. “Analysis of the Progress Toward the SB 1383 Organic Waste Reduction Goals (DRRR-2020-1693).” Accessed May 22, 2024. <https://www2.calrecycle.ca.gov/Publications/Details/1693>.

California Green Building Standards Code Compliance for Construction, Waste Reduction, Disposal and Recycling

In January 2023, the State of California adopted the most recent version of the CALGreen, establishing mandatory green building standards for all new and qualifying remodeled structures in California. CALGreen 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;
- Providing readily accessible areas for recycling by occupants.

Local

Envision San José 2040 General Plan

The General Plan contains the following policies which are specific to utilities and service systems and applicable to the proposed project:

Policy	Description
IN-3.3	Meet the water supply, sanitary sewer and storm drainage level of service objectives through an orderly process of ensuring that, before development occurs, there is adequate capacity. Coordinate with water and sewer providers to prioritize service needs for approved affordable housing projects.
IN-3.5	Require development which will have the potential to reduce downstream LOS to lower than “D”, or development which would be served by downstream lines already operating at a LOS lower than “D”, to provide mitigation measures to improve the LOS to “D” or better, either acting independently or jointly with other developments in the same area or in coordination with the City’s Sanitary Sewer Capital Improvement Program.
IN-3.7	Design new projects to minimize potential damage due to stormwaters and flooding to the site and other properties.
IN-3.9	Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.
MS-3.1	Require water-efficient landscaping, which conforms to the State’s Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation needs or other area functions.
MS-3.2	Promote use of green building technology or techniques that can help to reduce the depletion of the City’s potable water supply as building codes permit.
MS-3.3	Promote the use of drought tolerant plants and landscaping materials for nonresidential and residential uses.

IN-3.10	Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit.
EC-5.16	Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.

In addition to the above-listed San José General Plan policies, new development in San José is also required to comply with programs that mandate the use of water-conserving features and appliances and the Santa Clara County Integrated Watershed Management (IWM) Program, which minimizes solid waste.

San José Zero Waste Strategic Plan/Climate Smart San José

Climate Smart San José provides a comprehensive approach to achieving sustainability through new technology and innovation. The Zero Waste Strategic Plan outlines policies to help the City of San José foster a healthier community and achieve its Climate Smart San José goals, including 75 percent diversion of waste from the landfill by 2013 and zero waste by 2022. The Climate Smart San José also includes ambitious goals for economic growth, environmental sustainability, and enhanced quality of life for San José residents and businesses.

San José Sewer System Management Plan

The purpose of the Sewer System Management Plan (SSMP) is to provide guidance to the City in the operation, maintenance, and rehabilitation of the sewer assets of the City of San José. The SSMP includes construction standards and specifications for the installation and repair of the collection system and its associated infrastructure.

Private Sector Green Building Policy

The City of San José's Green Building Policy for new private sector construction encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in the design process. This policy establishes baseline green building standards for private sector construction and provides a framework for the implementation of these standards. It is also intended to enhance the public health, safety, and welfare of San José residents, workers, and visitors by fostering practices in the design, construction, and maintenance of buildings that will minimize the use and waste of energy, water, and other resources.

San José Construction and Demolition Diversion Deposit Program

The Construction and Demolition Diversion Deposit Program (CDDD) requires projects to divert at least 50 percent 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 construction and demolition 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.

California Green Building Standards Code Compliance for Construction, Waste Reduction, Disposal and Recycling

The City of San José requires 75 percent diversion of nonhazardous construction and demolition debris for projects that qualify under CALGreen, which is more stringent than the state requirement of 65 percent (San José Municipal Code Section 9.10.2480).

4.19.1.2 *Existing Conditions*

Water Services

Water service to the Project area is provided by the San José Municipal Water System, which obtains its water supply from a combination of groundwater sources, purchased water from its two wholesale water suppliers, Valley Water and San Francisco Public Utilities Commission, and recycled water. The service area covers both residential and commercial land uses, and approximately 130,000 residents receive their water service through San José Municipal Water System.¹⁴⁷ Based on San José Municipal Water System's actual 2020 water usage, per capita water demand is approximately 181 gallons per day.¹⁴⁸

The Project Site includes a vacant graded parcel and surface parking lots, which do not generate water demand other than minor irrigation for landscaped islands in some of the surface parking lots. As described in Section 3.39 Utility Improvements, there are existing 12 inch water lines in West Trimble Road and Orchard Parkway.

Sanitary Sewer/Wastewater Treatment

Wastewater from the City is treated at the San José/ Santa Clara Regional Wastewater Facility (Facility), which is administered and operated by the City's Department of Environmental Services. The Facility provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons per day of wastewater. The Facility treats an average of approximately 84 millions of gallons per day of wastewater and serves 1.4 million residents and 17,000 businesses in eight cities and four sanitation districts.¹⁴⁹ The Facility has the capacity to treat 167 million gallons of wastewater per day (mgd) during dry weather flow, with the City allocated 108.6 mgd of existing

¹⁴⁷ City of San José. 2020 Urban Water Management Plan. June 2021. Page ES-1.

¹⁴⁸ Ibid. Page ES-3.

¹⁴⁹ City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed May 16, 2025.

<https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility>.

capacity.¹⁵⁰ The City of San José generates approximately 69.8 mgd of dry weather average flow, leaving 38.8 of excess treatment capacity at the Facility for the City's wastewater treatment demands.¹⁵¹ The Facility is currently operating under a 120 mgd weather effluent flow constraint and, in 2022, the average dry weather effluent flow was 60.6 mgd.¹⁵²

The project site does not currently generate wastewater. As described in Section 3.39 Utility Improvements, there is an existing 20-inch sanitary sewer line in West Trimble Road.

Storm Drainage

The City of San José owns and maintains the municipal stormwater drainage system which serves the Project Site. The Project Site is located within an urbanized area served by an existing storm drainage system. Surface runoff from the Project Site storm drains discharge into the City's storm drain system, which carries runoff into the Guadalupe Watershed and eventually into the San Francisco Bay.¹⁵³ Surface runoff from the Project Site flows into a 108-inch storm drain line in West Trimble Road and a 96-inch storm drain line in Orchard Parkway.

Solid Waste

The City of San José generates approximately 1.7 million tons of solid waste annually.¹⁵⁴ Most of that waste (approximately 60 percent) is diverted and disposed of at recycling facilities and composting facilities. Solid waste generated within the City is transported to Guadalupe Mines, Kirby Canyon, Newby Island, and Zanker Road landfills. The City has an existing contract with Newby Island Sanitary Landfill (NISL). The NISL has approximately 12.4 million cubic yards (12,415,831 cubic yards or 9,311,873 tons) of disposal capacity remaining and an estimated closure date of 2035.¹⁵⁵ The Project Site does not currently generate solid waste.

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:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications

¹⁵⁰ San José-Santa Clara Regional Wastewater Facility. "2022 Annual Pollution Prevention Report." August 2020. Page 4. Accessed May 16, 2025. <https://www.sanjoseca.gov/home/showpublisheddocument/99424/638224377363630000>

¹⁵¹ City of San José. *Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan*. SCH# 2009072096. September 2011. Page 648.

¹⁵² San José-Santa Clara Regional Wastewater Facility. "2022 Annual Self-Monitoring Report." Page 5. Accessed May 16, 2025. <https://www.sanjoseca.gov/home/showpublisheddocument/94789/638124181781530000>.

¹⁵³ City of San José. "Utility Viewer." Accessed May 16, 2025. <https://gis.sanjoseca.gov/maps/utilityviewer/>

¹⁵⁴ City of San José. *Envision San José 2040 General Plan Integrated Final Program Environmental Impact Report*. SCH: 2009072096. September 2011. Page 650.

¹⁵⁵ Boccaleoni, Anthony. Republic Services. Personal Communication. May 12, 2023.

facilities, the construction or relocation of which could cause significant environmental effects?

- b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) 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

Potable water use for the Project would be limited to domestic uses such as toilets, sinks and drinking fountains. The potable water demands of the Project would be met by the San José Municipal Water System. The Project would install new domestic and fire water lines on-site that would connect with the existing 12-foot water mains located along West Trimble Road and Orchard Parkway. The Project would not require the construction or expansion of potable water delivery systems or the expansion of the boundaries of the San José Municipal Water System service area. The construction of the new water laterals would be subject to the PDMs identified in this SPPE Application. Therefore, the Project would not result in significant environmental effects related to the relocation or construction of new or expanded potable water facilities. **(Less than Significant Impact)**

Recycled Water

Recycled water for the Project would be used for landscaping and data center cooling purposes. There is currently no existing recycled water service to the Project Site. However, as part of a separate development project, a recycled water pipeline would be extended from an existing recycled water main at the intersection of Montague Expressway and Kruse Drive in San Jose to Orchard Parkway adjacent to the Project Site. The impacts of construction of the new recycled water line underwent a separate environmental review and is not part of the Project. However, the

construction of the new recycled water laterals that the Project proposes would be subject to the PDMs identified in this SPPE Application. Therefore, the Project would not result in significant environmental effects related to the relocation or construction of new or expanded recycled water facilities. **(Less than Significant Impact)**

Wastewater Treatment Facilities

The proposed Project would connect to the City's existing sanitary sewer system. As mentioned in Section 3.3.9.2 Sanitary Sewer Infrastructure, the NTDC would connect to the 20-inch sanitary sewer main in West Trimble Road. Lateral connections may also be made to the 48-inch main in West Trimble Road or the 15-inch main in Orchard Parkway. The entire Project would be supported by these new sanitary sewer connections. The construction of new sewer lines would be subject to the PDMs identified in this SPPE Application. Therefore, the Project would not result in significant environmental effects related to the relocation or construction of new or expanded wastewater and sanitary sewer facilities. **(Less than Significant Impact)**

Stormwater Drainage Facilities

As discussed in Section 4.10 Hydrology and Water Quality, the Project would result in an increase of impervious surface and runoff at the Project Site. The Project would be required to comply with the MRP and City of San José Policy 6-29, 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. Numerous biotreatment areas would be located on-site to ensure runoff generated on-site is managed using LID methods. The proposed Project would construct new storm drain lines and manholes throughout the Project Site which would capture and convey runoff to the proposed biotreatment areas prior to release into existing storm drain mains in West Trimble Road and Orchard Parkway. The proposed storm drainage improvements would occur during grading and would be required to implement the PDMs identified in this SPPE Application. Therefore, the Project would not result in significant environmental effects related to the relocation or construction of new or expanded storm drain facilities. **(Less than Significant Impact)**

Electric Power, Natural Gas, and Telecommunication Facilities

The Project would construct a new 115-34.5 kV substation, to connect to PG&E's 115kV electrical distribution system. PG&E metering equipment would be constructed in the substation with manual disconnect on the line and load sides of the equipment. In addition, a PG&E meter and relay building would be constructed near the metering 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 PG&E switching station would be located immediately adjacent to the southern boundary of the proposed on-site substation and will be designed and constructed to PG&E standards. The proposed switching station would interconnect the new PG&E distribution to the existing PG&E Trimble Substation and the existing PG&E Newark Substation. The environmental impacts of electric infrastructure improvements are included the analysis in this SPPE Application.

The Project would not connect to the existing natural gas lines because the Project Applicant has proposed that no natural gas infrastructure would be constructed. The Project would tie into the existing telecommunication lines currently provided by AT&T and would not require the expansion or construction of new telecommunication facilities.

For these reasons, the Project would not result in significant environmental effects related to the relocation or construction of new or expanded electric, natural gas, or telecommunication facilities since the Project would be subject to the PDMs identified in this SPPE Application to reduce environmental impacts. **(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 Project would have potable water demand rate of approximately 29 gallons per day per employee, which equates to approximately 371,000 gallons of per year or 1.14 acre-feet of per year potable water.¹⁵⁶ Potable water would only be used for indoor domestic uses.

The Project would utilize recycled water for data center cooling operations and landscape irrigation. The 18 hybrid closed-circuit cooling towers for the DC North and DC West would consume approximately 320 million gallons per year (or 981 acre-feet per year) of recycled water. The irrigation would require approximately 5.1 million gallons of recycled water per year (or 16 acre-feet of recycled water per year).

The City of San José Municipal Water could supply water to the Project. Per the Water Supply Assessment prepared for the Project pursuant to SB 610 requirements, sufficient potable water and recycled water supply from the City of San José Municipal Water are available to serve the Project (refer to Appendix O). During a single dry year and multiple dry years, overall demand for potable water in the San José Municipal Water system is expected to be higher than the available supply, but any potential shortage would be abated through a Water Shortage Contingency Plan that includes water conservation measures.¹⁵⁷ As noted above, the Project would use a minimal amount of potable water, with recycled water accounting for the vast majority of the Project's water demand. Recycled water supply is drought resilient and considered 100 percent available in all years.¹⁵⁸ 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)**

¹⁵⁶ Todd Groundwater. *Administrative Draft Water Supply Assessment NorthTown Data Center*. May 2025. Page 3.

¹⁵⁷ Ibid. Page 12.

¹⁵⁸ Ibid. Page 12.

-
- 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?
-

As shown in Table 3.3-3, the proposed Project would generate approximately 218,844 gallons per day or 79,878,060 gallons per year of wastewater. This would be approximately 0.5 percent of the remaining allocation (38.85 millions of gallons per day) of the Facility. For this reason, the Project would not result in demand exceeding the wastewater commitments. Therefore, the proposed Project would not represent a significant increase in wastewater above existing commitments and would not impact capacity for a wastewater treatment provider to provide wastewater treatment. **(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?
-

As discussed in Section 4.19.1.2 Existing Conditions, the Newby Island Landfill has approximately 12.4 million cubic yards of capacity remaining. The Project would generate approximately 385 tons¹⁵⁹ of solid waste per year, which would be less than 0.004 percent of the remaining capacity (9,311,873 tons) at Newby Island Landfill. Therefore, the slight increase in solid waste that would be generated by the Project would be accommodated by local landfills. Furthermore, each jurisdiction in Santa Clara County has a landfill diversion requirement of 50 percent per year. According to the latest Five-Year Countywide or Regional Agency Integrated Waste Management Plan, the County has adequate disposal capacity beyond 2030.¹⁶⁰ The Project would be required to conform to City plans and policies and other applicable laws and regulations to reduce solid waste generation and would be served by a landfill with adequate capacity. For these reasons, the proposed Project would not exceed the capacity of existing landfills or solid waste disposal infrastructure, nor would it impair the attainment of solid waste reduction goals. **(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?
-

During construction, the Project would be required to provide on-site recycling bins, develop a construction waste management plan, salvage at least 75 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measures as per current CALGreen requirements. While the Project would increase solid waste generation

¹⁵⁹ Using a rate of 0.930 tons of solid waste per year per 1,000 square feet. 414,000 square feet of data center building/1,000 square feet = 414 square feet. 414 square feet * 0.930 tons per year = 385 tons of solid waste per year. Source: California Air Pollution Officers Association. "California Emissions Estimator Model (CalEEMod) User Guide Version 2022.1, Appendix G, Default Data Tables." April 2022. G-36. Accessed June 20, 2025. <https://www.caleemod.com/user-guide>.

¹⁶⁰ Santa Clara County. *Five-Year CIWMP/RAIWMP Review Report*. June 2016.

compared to existing conditions, the Project would conform with City's Zero Waste Strategic Plan. Compliance with the local policy would ensure that the proposed Project would not result in significant impacts on solid waste disposal capacity in excess of state or local standards or in excess of NISL remaining capacity. For this reason, the Project would be compliant with the City's local regulations for garbage and recycling . **(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?

The geographic study area for cumulative impacts to utilities and service systems is citywide or within the applicable utility's service area. 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.¹⁶¹ The Envision San José 2040 General Plan Integrated Final Program EIR found that buildout of the General Plan would not result in impacts related to water supply, wastewater treatment and storm drainage facilities, or solid waste infrastructure. Any proposed new or expanded facilities necessitated by future cumulative development would be subject to environmental review and is not anticipated to result in 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.

The geographic area for cumulative water supply is the service area of San José Municipal Water. As described above under checklist question b), a WSA was completed for the Project that determined there is sufficient capacity to serve the Project and future development within the San José Municipal Water service area and the Project. The WSA would ultimately be adopted by the Municipal Water Board of Directors, which is the San José City Council. For these reasons, there is no significant cumulative water supply impact.

The geographic area for cumulative wastewater treatment is the service area of the Facility. As discussed under checklist question c), there is sufficient treatment capacity at the Facility for the buildout of the General Plan and the Project. As such, the Project would not result in a cumulatively significant impact on wastewater treatment facilities.

The geographic area for cumulative landfill capacity is Santa Clara County. As discussed under checklist question d), the Envision San José 2040 General Plan Integrated Final Program EIR determined that the increase in waste generated by build out of the General Plan (which includes the Project and future cumulative projects) would not result in an exceedance of capacity at existing

¹⁶¹ The extension of a recycled water line from the current main at Montague Expressway and Kruse Drive to the intersection of Trimble Avenue and Orchard Parkway is an independent project, subject to its own environmental review, and being undertaken by the Commission irrespective of the proposed data center.

landfills or otherwise impair the attainment of solid waste reduction goals. Cumulative projects in the City would be required to conform to City plans and policies to reduce solid waste generation and increase waste diversion, such as the Zero Waste Strategic Plan and General Plan Policies IN-1.5, IN-5.1, IN-5.3, IN-5.4, and IP-3.8. As such, the Project would not result in a cumulatively significant solid waste impact.

All cumulative projects are required to adhere to the requirements of the Zero Waste Strategic Plan and General Plan policies, thereby complying with 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 statutes 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*

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.

4.20.1.2 *Existing Conditions*

The Project Site and Intersection Improvement area are not located in or adjacent to State responsibility areas or lands classified as very high fire hazard severity zones.¹⁶² The nearest State responsibility area is approximately six miles northeast of the site in the foothills east of Milpitas, and the nearest very high fire hazard severity zone is over 10 miles to the southwest near Saratoga.¹⁶³

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:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

¹⁶² California Department of Forestry & Fire Protection. "City of San José – Santa Clara County Local Responsibility Area Fire Hazard Severity Zones." February 24, 2025. Accessed March 10, 2025.

<https://calfire.app.box.com/s/wahuw9ny7cgn89xpxh7092ur50r1pwvj/file/1785859821009>

¹⁶³ Ibid.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

4.20.2.1 *Project Impacts*

The Project Site and Intersection Improvement Area are 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 and Intersection Improvement Area are 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

4.21.1 Environmental Setting

4.21.1.1 *Regulatory Framework*

Federal

EO 12898 has been rescinded pursuant to EO 14173, and EO 14096 has been rescinded pursuant to EO 14148. There is currently no federal guidance on environmental justice.

State

Pursuant with the California Code, Government Code Section 65040.12 and Public Resources Code Section 72000, the State defines environmental justice as the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies Environmental Justice includes, but is not limited to, all of the following:

- (A) The availability of a healthy environment for all people.
- (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities.
- (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision making process.
- (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.

Senate Bill 535 Disadvantaged Communities

SB 535 was established in 2012 requiring that 25 percent of the funds in the Greenhouse Gas Reduction Fund (or Cap-and-Trade program) received under the Global Warming Solutions Act of 2006 (AB 32) be allocated to projects that benefit disadvantaged communities. Under the 2016 AB 1550, the minimum funding levels are as follows:

- At least 25 percent of funds must be allocated toward disadvantaged communities
- At least 5 percent must be allocated toward projects within low-income communities or benefiting low-income households
- At least 5 percent must be allocated toward projects within and benefiting low-income communities, or low-income households, that are outside of a CalEPA-defined disadvantaged communities but within ½ mile of a disadvantaged community.

CalEPA designates disadvantaged communities as follows:

1. Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0
2. Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores.
3. Census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0.
4. Lands under the control of federally recognized Tribes. For purposes of this designation, a Tribe may establish that a particular area of land is under its control even if not represented as such on CalEPA's DAC map and therefore should be considered a DAC by requesting a consultation with the CalEPA Deputy Secretary for Environmental Justice, Tribal Affairs and Border Relations at TribalAffairs@calepa.ca.gov.¹⁶⁴

The listed designations were effective as of July 1, 2022.

California Natural Resources Agency

The California Natural Resources Agency is a state agency that is responsible for protecting natural, historical, and cultural resources in California. The California Natural Resources Agency fulfills this mission by overseeing and supporting more than 26 distinct departments, conservancies, and commissions. The California Energy Commission is overseen by the California Natural Resources Agency and therefore required to consider environmental justice in their decision-making process if their actions have an impact on the environment, environmental laws, or policies. Such actions that require environmental justice consideration may include:

- Adopting regulations
- Enforcing environmental laws or regulations
- Making discretionary decisions or taking actions that affect the environment
- Providing funding for activities affecting the environment
- Interacting with the public on environmental issues

It is also the policy of the California Natural Resources Agency to consider the fair treatment of all races, cultures, and incomes during the planning, decision-making, development and implementation of all Resources Agency programs, policies and activities. Environmental justice efforts include, but are not limited to, the following:

- Identifying relevant populations that might be adversely affected by programs or projects submitted by outside parties, as appropriate.

¹⁶⁴ Office of Environmental Health Hazard Assessment. "SB 535 Disadvantaged Communities." Accessed April 17, 2025. <https://oehha.ca.gov/calenviroscreen/sb535>

- Seeking out and consulting with community groups and leaders to encourage communication and collaboration prior to taking actions that may have an impact on the environment, environmental laws or policies.
- Broadly distributing public information, in multiple languages if appropriate, to encourage participation in public processes.
- Ensuring that public documents and notices relating to environmental issues that may have an impact on human health are concise, understandable, and readily accessible to the public, printed in multiple languages if appropriate.
- Holding required public meetings, hearings, and workshops at times and in locations that encourage meaningful public participation by members of affected communities.
- Working in conjunction with other federal, state, regional, and local agencies to ensure consideration of disproportionate impacts on relevant populations.
- Fostering broad access to existing and proposed data sets and technology to better identify, analyze, and respond to environmental justice issues.
- Providing appropriate training to staff on environmental justice issues so that recognition and consideration of such issues are incorporated into daily program activities.¹⁶⁵

California Environmental Protection Agency

CalEPA works with CARB, CalRecycle, the Department of Pesticide Regulation, DTSC, the Office of Environmental Health Hazard Assessment (OEHHA), and the SWRCB to implement environmental justice principles and collect data about communities throughout California. Efforts to achieve environmental justice include listening to community concerns from environmental justice liaison, distributing environmental justice grants, and identifying disadvantaged communities that are most impacted by pollution (air quality and GHG emissions). The most recent Disadvantaged Communities Designation was finalized on May 3, 2022.¹⁶⁶

CalEnviroScreen

CalEnviroScreen is a mapping modeling tool developed by CalEPA Office of Environmental Health Hazard Assessment to identify and address California communities that are disproportionately burned by multiple sources of pollution.¹⁶⁷ The mapping tool includes information about geographics boundaries, air pollution, hazardous threats, sensitive populations, socioeconomic percentiles, and race/ethnicity percents.¹⁶⁸ The latest version of this model is CalEnviroScreen 4.0, which was released on May 1, 2023.

¹⁶⁵ California Resources Agency. "Environmental Justice Policy." Accessed April 16, 2025.

<https://www.conservation.ca.gov/Documents/Environmental%20Justice%20Policy%20-%20CNRA.pdf>.

¹⁶⁶ California Environmental Protection Agency. "Environmental Justice Program." Accessed April 16, 2025.

<https://calepa.ca.gov/envjustice/>.

¹⁶⁷ Ibid.

¹⁶⁸ Office of Environmental Health Hazard Assessment. "CalEnviroScreen 4.0 Data Dashboard and User Guide." December 2022. Accessed April 16, 2025.

CalEPA has the model provide a CalEnviroScreen score to represent the cumulative pollution burden impact for a census tract based on (1) the average of exposures and environmental effects (i.e., Pollution Burden) multiplied by the average of sensitive populations and socioeconomic factors (i.e., Population Characteristics).¹⁶⁹ The pollution burden is calculated using the following factors: cleanup sites, DPM, drinking water contaminants, groundwater threats, hazardous waste impaired waters, lead risk from housing, pesticide use, solid waste sites, traffic impacts, and toxic release from facilities. The population characteristics are based on asthma, cardiovascular disease, education, housing burden, linguistic isolation, low birth weight, poverty, and unemployment. The Pollution Burden and Population Characteristics scores range from 0.1 to 10.¹⁷⁰ The CalEnviroScreen scores range from 0 to 100 with 100 being the highest score.¹⁷¹

4.21.1.2 *Existing Conditions*

The environmental justice existing conditions and methodology are based on the OEHHA CalEnviroScreen tool due to the EPA terminating the federal environmental justice guidance.¹⁷² For the purposes of this analysis, an environmental justice community is defined as a SB 535 Disadvantaged Community.

The Project Site (including the Intersection Improvement Area) is located within Census Tract 6085505006. The Project Site is not within a designated SB 535 disadvantaged community.¹⁷³ The population in this tract is approximately 11,441 people. Some of the population characteristics of this tract are summarized below.¹⁷⁴

- Age
 - o 12.26 percent of the population is 10 years or younger
 - o 86.35 percent of the population is 10 to 64 years
 - o 1.39 percent of the population is 65 years or older
- Race/Ethnicity
 - o 67.58 percent of the population is Asian American
 - o 24.25 percent of the population is White

¹⁶⁹ Office of Environmental Health Hazard Assessment. "Scoring & Model." Accessed April 16, 2025.

<https://oehha.ca.gov/calenviroscreen/scoring-model>

¹⁷⁰ Office of Environmental Health Hazard Assessment. *CalEnviroScreen 4.0 Report*. October 2021. Pages 148 and 198.

¹⁷¹ Office of Environmental Health Hazard Assessment. *CalEnviroScreen 4.0 Report*. October 2021. Page 200.

¹⁷² United States Environmental Protection Agency. "EPA Terminates Biden's Environmental Justice, DEI Arms of Agency." March 12, 2025. Updated March 14, 2025. Accessed May 14, 2025. <https://www.epa.gov/newsreleases/epa-terminates-bidens-environmental-justice-dei-arms-agency#:~:text=EPA%20Terminates%20Biden's%20Environmental%20Justice%2C%20DEI%20Arms%20of%20Agency,-March%2012%2C%202025&text=WASHINGTON%20%E2%80%93%20Today%2C%20the%20U.S.%20Environmental,Inclusion%20Arms%20of%20the%20agency.>

¹⁷³ Office of Environmental Health Hazard Assessment. "SB 535 Disadvantaged Communities (2022 Update)." Accessed April 17, 2025. <https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities>

¹⁷⁴ Office of Environmental Health Hazard Assessment. "CalEnviroScreen 4.0 Data Dashboard." Accessed April 16, 2025.

- o 2.18 percent of the population is Black
- o 1.74 percent of the population is Other

Additionally, approximately seven percent of the people in this census tract are living below twice the federal poverty level (a measurement of poverty), which is a relatively low poverty percentage.¹⁷⁵ The overall population characteristics, which represent physiological traits, health status, or community characteristics that can result in increased vulnerability to pollution, of this tract are within the 22nd percentile. Refer to Figure 4-6 for the population characteristics percentile at the Project Site and surrounding area.

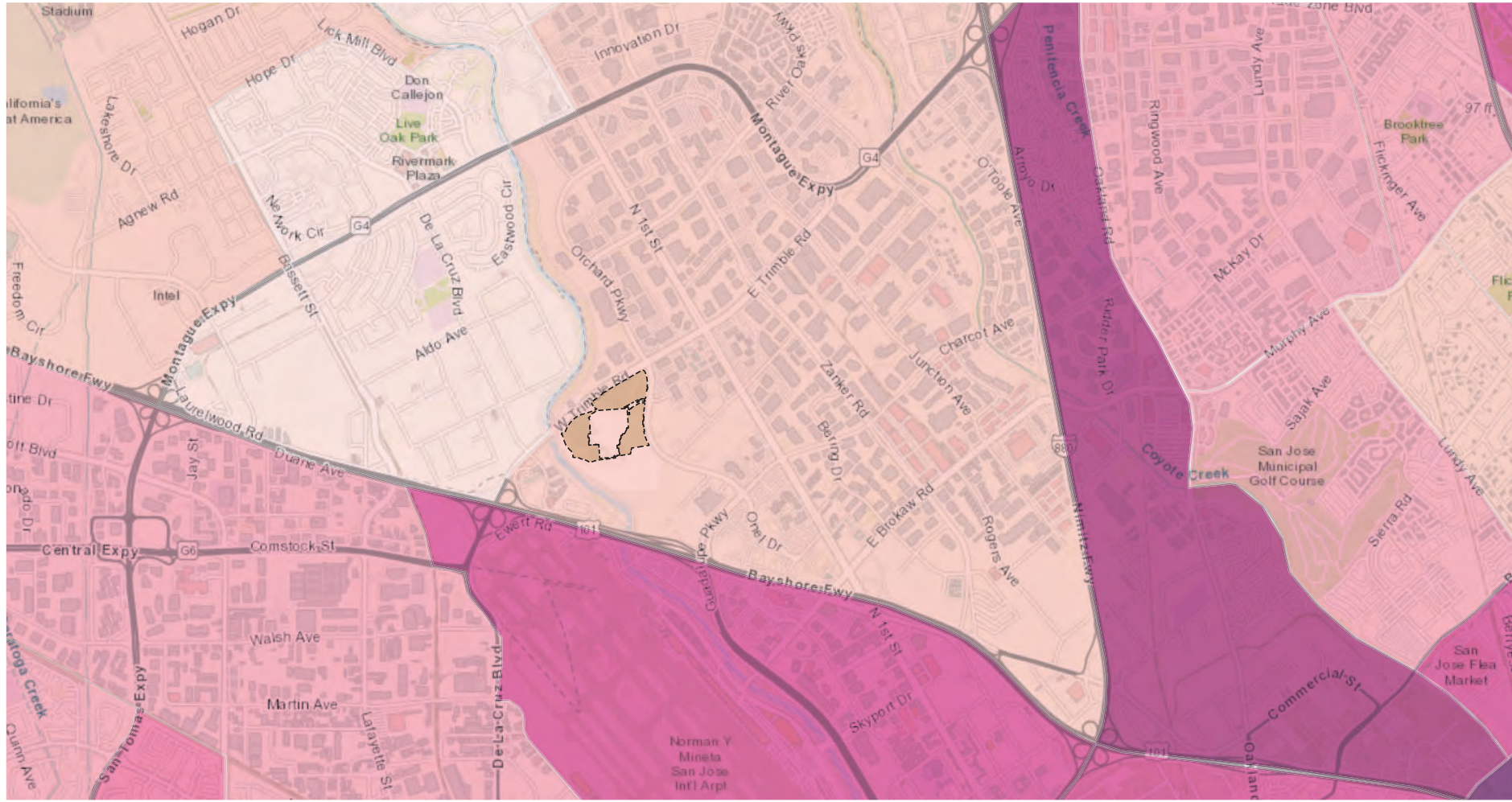
The pollution burden, which represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution, of this census tract are summarized below with the overall pollution burden at the 77th percentile.¹⁷⁶ Refer to Figure 4-7 for the pollution burden percentile at the Project Site and surrounding area.

- Exposure Indicators
 - o 18th percentile for ozone exposure
 - o 25th percentile for PM_{2.5} exposure
 - o 84th percentile for DPM exposure
 - o 41st percentile for drinking water contamination
 - o 39th percentile for toxic release
 - o 90th percentile for traffic exposure
- Environmental Effects Indicators
 - o 100th percentile for cleanup site
 - o 94th percentile for groundwater threats
 - o 97th percentile for hazardous waste
 - o 44th percentile for impaired water
 - o 80th percentile for solid waste sites

This census tract has an overall CalEnviroScreen 4.0 score of 39, which indicates a lower burden and vulnerability in this census tract community. Figure 4-8 shows the CalEnviroScreen 4.0 score for the Project Site in relation to other nearby parcels. Since the Project Site is not located within a census tract that is designated as a disadvantaged community pursuant with SB 535 and does not have a score within the top 25 percent of CalEnviroScreen 4.0, the Project Site is not in an area defined as an environmental justice community. The nearest SB 535 disadvantaged communities, which are 3,000 feet from the Project Site, are shown in Figure 4-9.

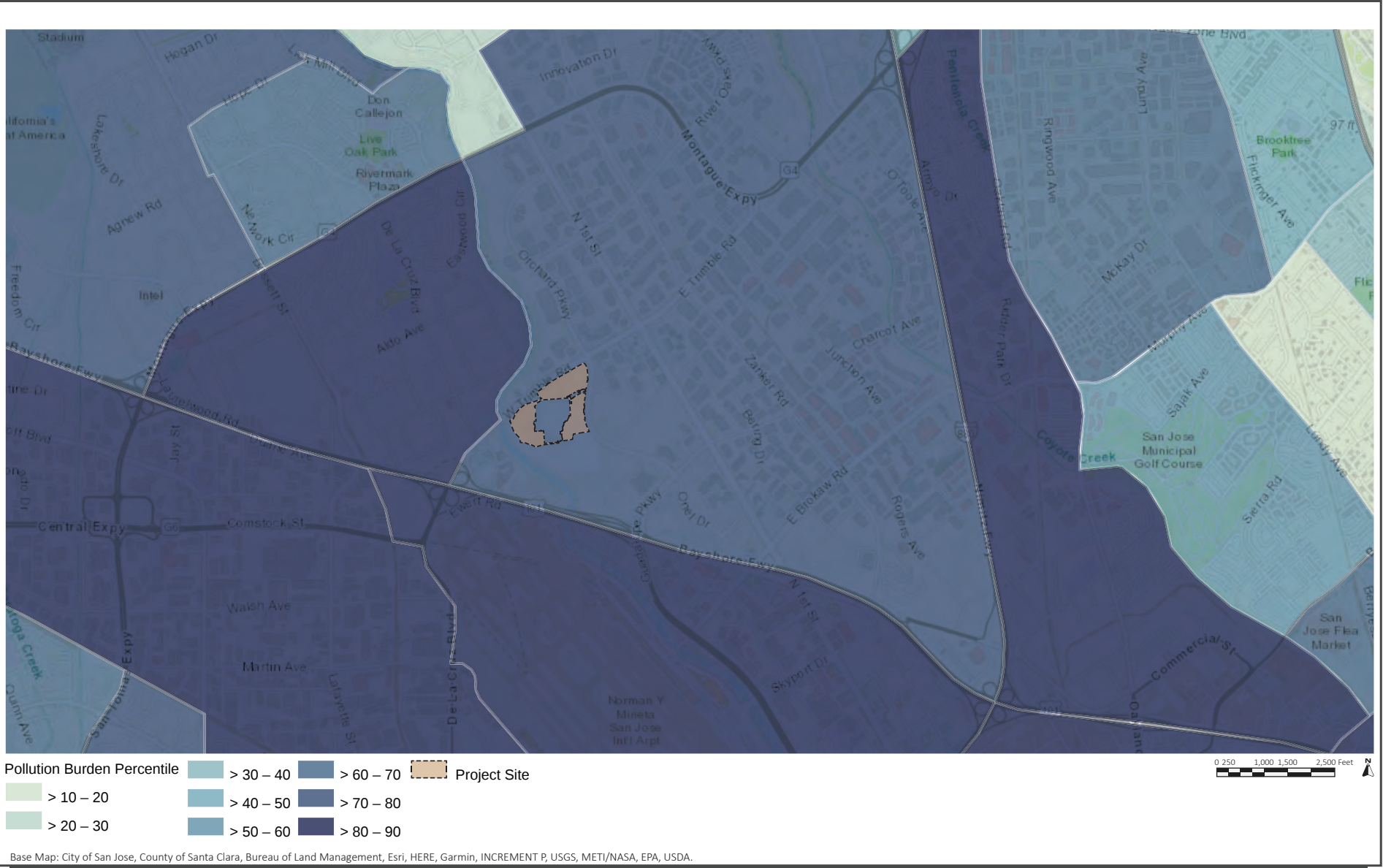
¹⁷⁵ Office of Environmental Health Hazard Assessment. "CalEnviroScreen 4.0 Indicator Maps." Accessed April 17, 2025.

¹⁷⁶ Office of Environmental Health Hazard Assessment. "CalEnviroScreen 4.0 Data Dashboard." Accessed April 16, 2025.



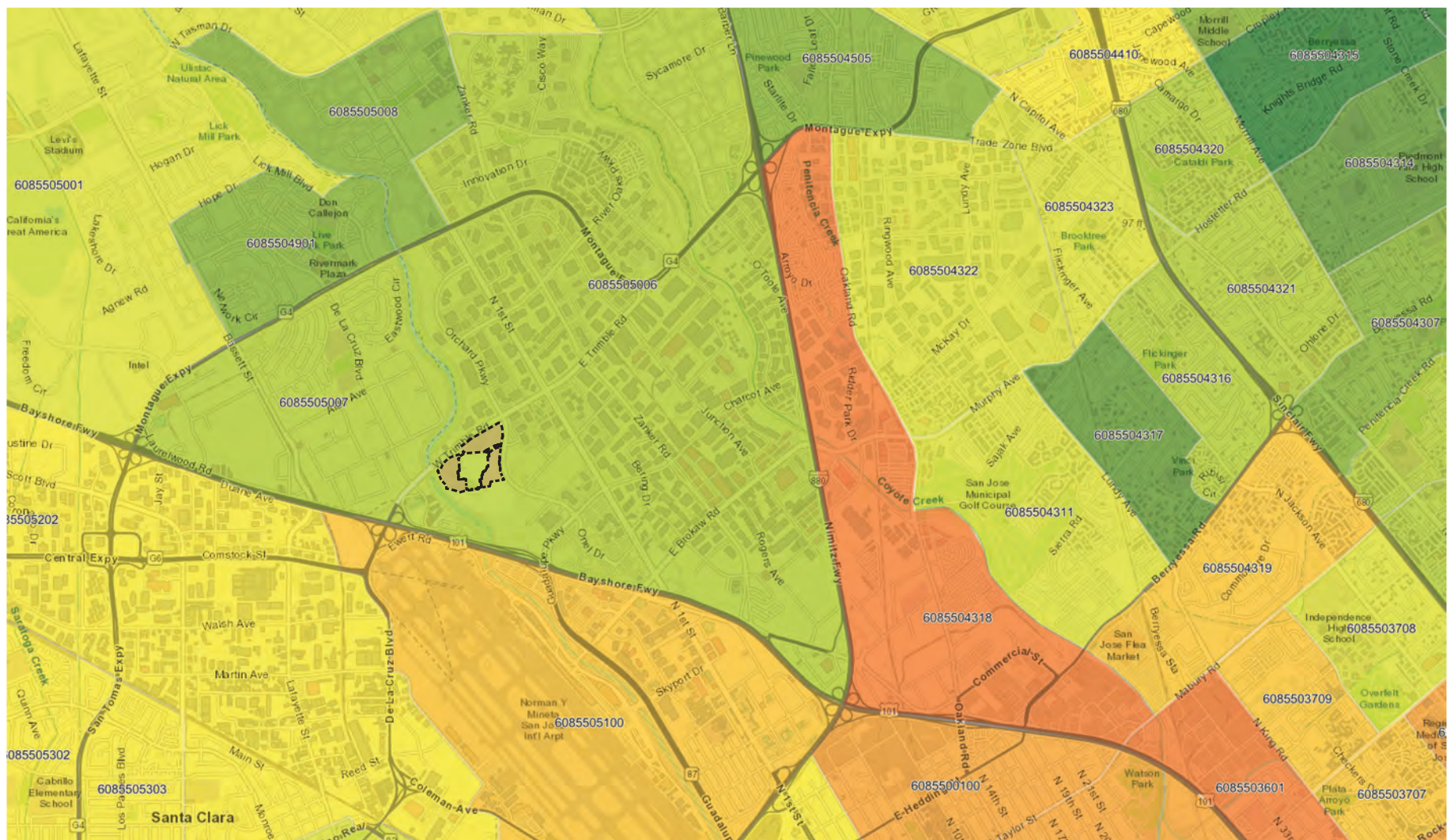
Base Map: City of San Jose, County of Santa Clara, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA.

POPULATION CHARACTERISTICS PERCENTILE	FIGURE 4-6
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POLLUTION BURDEN PERCENTILE

FIGURE 4-7



CalEnviroScreen 4.0 Results

> 90-100 (Highest Scores) > 80-90 > 70-80 > 60-70 > 50-60 > 40-50 > 30-40 > 20-30 > 10-20 0-10 (Lowest Scores)

CalEnviroScreen 4.0 High Pollution, Low Population

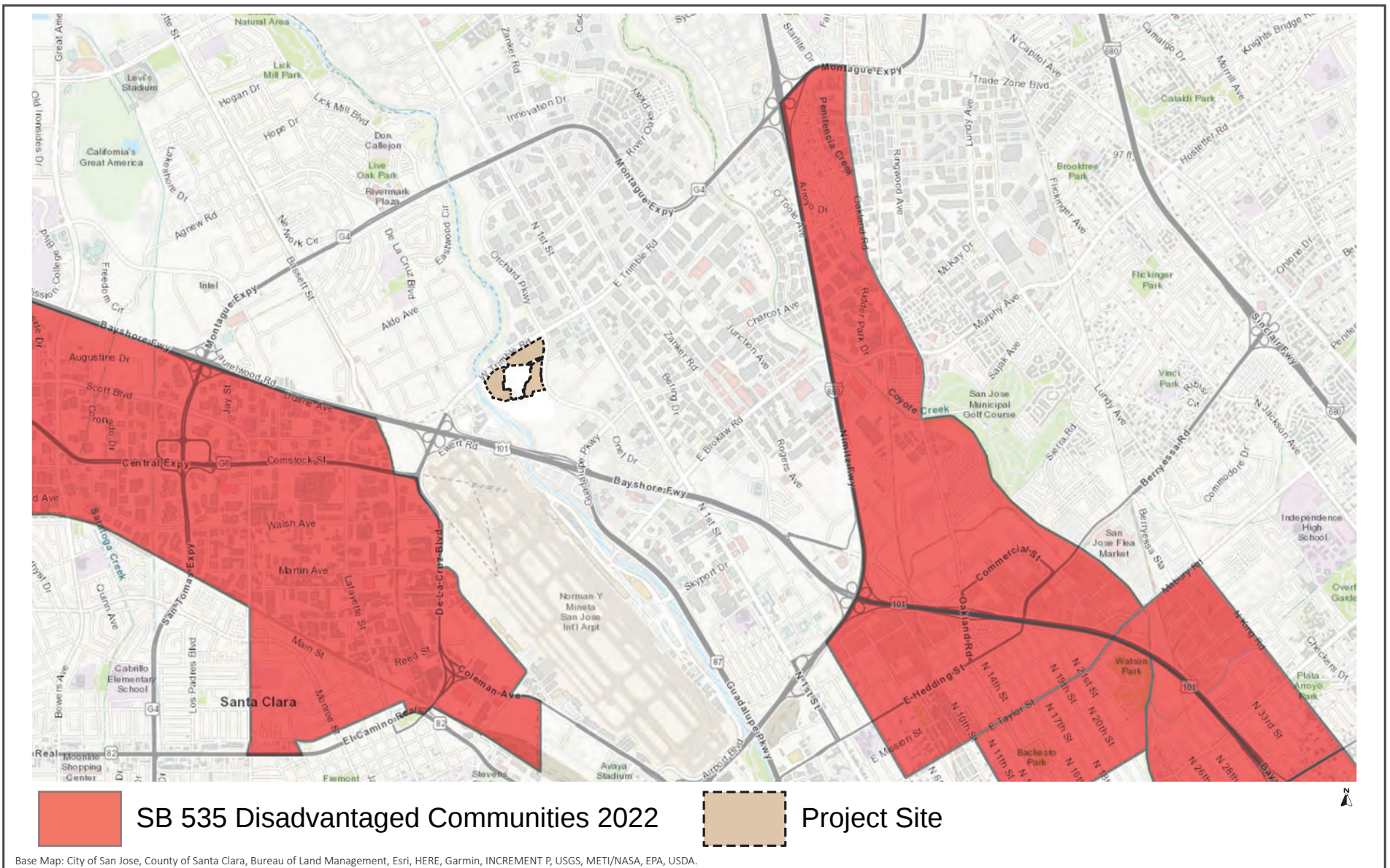
Project Site



Base Map: City of San Jose, County of Santa Clara, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA.

CALENVIROSCREEN 4.0 SCORES

FIGURE 4-8



SB 535 DISADVANTAGED COMMUNITIES

FIGURE 4-9

4.21.2 Environmental Impacts

The following resource areas discuss impacts to environmental justice 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 populations may experience disproportionate visual impacts if the siting of visually intrusive or degrading projects, particularly industrial facilities, occurs within or near environmental justice communities to a greater extent than within the community at large.

As depicted in Figure 4-9, the Project Site is not located in a disadvantaged community. As discussed in Section 4.1 Aesthetics, the proposed Project is located within an urbanized area of San José which already experiences light and/or glare from the surrounding development. The Project would be reviewed for consistency with the City's Design Guidelines, and other applicable codes, policies, and regulations to ensure that the Project would not adversely affect the visual quality of the Project area and would conform to existing architectural and landscaping standards. The proposed Project would be required to comply with the City's Outdoor Lighting on Private Development Policy (Policy 4-3). Furthermore, residents in nearby SB 535 disadvantaged communities are over 3,000 feet to 1.5 miles away from the Project Site and would not be directly impacted by the new light and/or glare from the Project. Implementation of the proposed Project would not substantially degrade the existing visual quality or character of the site or its surrounding area. Therefore, the proposed Project would not have the potential to affect high minority populations. **(Less than Significant Impact)**

Air Quality

The Air Quality analysis for the Project (refer to section 4.3 Air Quality) noted that no sensitive receptors were within 1,000 feet of the project site (the typical buffer distance for health risk modeling). Instead, health risk modeling was completed for the nearest sensitive receptor to the Project Site as identified in Table 4.3-19. The analysis determined that no off-site receptors (including the nearest resident, worker, and school attendees) would experience any acute or chronic cancer or non-cancer effects of health significance during construction and operation of the Project. Refer to Table 4.3-22, Table 4.3-24, Table 4.3-25 for the health risk results at off-site receptors. While the Air Quality health risk modeling did not specifically model receptors in a SB 535 disadvantaged community (shown in Figure 4-9), the modeling results mentioned above show that people residing and working in these areas would not be exposed to public health risks from the project due to the distance.

Both construction and operational emissions from the Project 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. Additionally, air quality emissions generated from the construction of the Project would be further reduced with the incorporation of PDM AIR-1. Based on these conclusions, the Project would not cause disproportionate air quality impacts for sensitive populations like the environmental justice population represented in Figure 4-9. **(Less than Significant Impact)**

Cultural and Tribal Cultural Resources

There are no SB 535 disadvantaged communities tribal areas within proximity to the Project Site as shown in Figure 4-9 that could be impacted by the Project Site. **(No Impact)**

Hazards and Hazardous Materials

Environmental Justice populations may experience disproportionate hazards and hazardous materials impacts if the storage and use of hazardous materials within or near SB 535 disadvantaged communities occur to a greater extent than within the community at large. The possibility of a disproportionate impact upon a SB 535 disadvantaged community due to the planned storage and use of hazardous materials on the site is low based on the distance of the Project Site to the nearest SB 535 disadvantaged community (over 3,000 feet away). The Project would contain diesel fuel, a hazardous material, to run the emergency generators. As discussed in Section 4.9 Hazards and Hazardous Materials, 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 in the engineering office 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 environmental justice population would be very unlikely and is considered less than significant. Further, implementation of PDMs 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 environmental justice 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 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 PDMs would reduce hydrology impacts to less than significant levels. The Project would be designed in accordance with the North San Jose Floodplain Management Policy and would not impede or redirect flood flows. 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 SB 535 disadvantaged communities population. Additionally, implementation of the City's Standard Permit Conditions would reduce impacts from construction activities to less than significant levels. The Project's hydrology and water quality impacts would be reduced to less than significant for all the area's population, including the environmental justice population. **(Less than Significant Impact)**

Land Use and Planning

A disproportionate land use impact on an environmental justice population could occur if a project would physically divide the established community of an environmental justice population or if a project near an environmental justice 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 CIC and IP under the City's General Plan and would be consistent with the land use designation. No conflicts with plans, policies, or related land use regulations would occur.

The site is currently zoned CIC and IP(PD), which allows for commercial, office, or industrial developments or a compatible mix of these uses. Data centers are allowed upon issuance of a Special Use Permit, and utility facilities are allowed upon issuance of a Conditional Use Permit. The Project would not pose significant individual impacts relating to land use and planning; therefore, no disproportionate impacts on the environmental justice population would occur either. **(No Impact)**

Noise and Vibration

Environmental justice populations may experience disproportionate noise impacts if the siting of unmitigated industrial facilities occurs within or near environmental justice communities to a greater extent than within the community at large. As depicted in Figure 4-6, the Project Site is located within an area of low-income and high minority populations.

Demolition and construction activities would increase existing noise levels at the adjacent land uses, but they would be temporary and intermittent. 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. Furthermore, the nearest environmental justice community is over 3,000 feet and construction noise at the distance would not be perceptible. Therefore,

potential noise effects related to demolition and construction would not result in a significant noise impact on the area's population, including the environmental justice population.

Additionally, the noise from operating the facility would not exceed the City's noise limits at the nearest land uses. 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 environmental justice population. **(Less than Significant Impact)**

Population and Housing

The potential for population and housing impacts to an environmental justice populations is predominantly driven by the temporary influx of non-local 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 once constructed due to the nature of a data center. 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 and would not likely seek housing closer to the Project Site. 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 environmental justice 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 environmental justice 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 environmental justice populations from this Project. **(No Impact)**

Transportation and Traffic

Significant reductions in levels of service have the potential to significantly impact environmental justice 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 environmental justice 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 environmental justice 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 environmental justice 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. Therefore, the Project's Utilities and Service Systems impacts would be less than significant for all the area's population, including the environmental justice population. **(Less than Significant)**

Section 5.0 Growth-Inducing Impacts

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 San José. The Project Site is developed with parking lots and internal roadways, with the exception of a small undeveloped area where DC North would be located. The entire Project Site is surrounded by existing infrastructure and both existing and planned development. The Project includes construction of infrastructure improvements such as an electric substation which would serve the Project, not the surrounding area. The proposed improvements in the Intersection Improvement Area would not increase roadway capacity. 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. The extension of the recycled water line to serve the site is an independent project being undertaken by the Commission (under its own environmental review) and would not serve to induce additional growth in the area.

Development of the Project Site would place two new data centers in 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 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 and intersection improvements. The operational phase would consume energy for multiple purposes including, but not limited to, 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 has also committed to either purchase or participate in a program that would achieve the same objective of carbon-free electricity use during operations (See Sections 3.4 Project Design Measures and 4.8 Greenhouse Gas Emissions – PDM GHG 1.1)

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 4.6 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 (i.e., 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.

Section 8.0 Alternatives

8.1 Evaluation Criteria

The primary goal of the Project is to be a state-of-the-art data center that provides greater than 99.999 percent reliability (five nines of reliability). The Project has been designed to reliably meet the increased demand of digital economy, its customers and the continued growth. The Project's purpose is to provide mission critical space to support 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 LBA RVI-Company I, LP LBA RVI-Company I, LP's clients. The NTDC will be supplied electricity by PG&E through an expansion of a recently permitted PG&E switching station adjacent to the NTDC site. The switching station will be owned and operated by PG&E (i.e., PG&E Switching Station Expansion). The NTDC will include a substation that will be owned and operated by LBA RVI-Company I, LP (i.e., Project Substation). The Project Substation will be located immediately adjacent to the PG&E Switching Station.

To ensure a reliable supply of high-quality power, the NTBGF was designed to provide electricity to the NTDC only in the event electricity cannot be supplied from PG&E and delivered to the NTDC campus. To ensure no interruption of electricity service to the servers housed in the NTDC buildings, the servers will be connected to uninterruptible power supply (UPS) systems that provide instantaneous protection from input power interruptions and frequency fluctuations. 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 NTBGF provides that backup power generation source.

The NTDC's Project Objectives are as follows:

- Develop a state-of-the-art data center large enough to meet the increased intensity of data processing, computational power, and energy demands from the projected growth of cloud computing and AI applications;
- Develop the NTDC on land that is currently zoned to permit a data center use at the subject location and that is acceptable to City of San José;
- Incorporate the most reliable and flexible form of backup electric generating technology into the NTBGF considering the following evaluation criteria.
 - **Reliability.** The selected backup electric generation technology must be extremely reliable in case of an emergency loss of electricity from the utility.
 - The NTBGF must provide a higher availability than 99.999 percent in order for the NTDC to achieve an overall reliability of equal to or greater than 99.999 percent availability at the critical load.
 - The NTBGF must provide reliability to the greatest extent feasible during natural disasters including earthquakes.

- The selected backup electric generation technology must have a proven built-in resiliency so if any backup unit fails due to external or internal failure, the system will have redundancy to continue to operate without interruption.
- The NTDC 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 able to be permitted and operational within a reasonable timeframe.
- **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 Project, LBA RVI-Company I, LP 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

LBA RVI-Company I, LP 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 LBA RVI-Company I, LP 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 LBA RVI-Company I, LP to provide the reliability required by its clients it was necessary to provide a backup generating system that could meet the maximum load that of the Project during full occupancy and include redundancy as described in Section 3.2.3 Generating Capacity. A reduced capacity system would not fulfill the basic Project Objectives of the Project.

8.3 Backup Electric Generation Technology Alternatives

LBA RVI-Company I, LP considered using potentially available alternative technologies including 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.

LBA RVI-Company I, LP 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 LBA RVI-Company I, LP 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 flywheel motion can typically only sustain 10 to 30 second outages at a time.

8.3.2 Gas-Fired Turbines

LBA RVI-Company I, LP considered using natural gas-fired turbines instead of diesel generators to supply backup power for the Project. This technology option was rejected because it would not meet the Project Objectives. Natural gas turbines have the advantage of better emission of NO_x 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. On-site 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 percent), 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 the Project, a mission critical data center facility. 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 renewable or CARB 2 diesel fuel for longer than 24-hour outages.

8.3.3 Gas-Fired Reciprocating Engines

LBA RVI-Company I, LP considered using natural gas-fired reciprocating engines instead of diesel generators to supply emergency backup power for the Project. This technology option was rejected because it would require interconnection to a single natural gas pipeline in the same manner as discussed above for Gas-Fired Turbines. For the reasons discussed above, a single point of interconnection would not meet the reliability needs outlined in the Project Objectives. Additionally, as discussed above, storage of sufficient natural gas on-site to maintain emergency backup electricity demands of the Project during an outage would not be tenable given the volume of natural gas that would be required.

8.3.4 Battery Storage

LBA RVI-Company I, LP 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 LBA RVI-Company I, LP has incorporated them into the overall backup electrical system design through the use of the UPS. As described in Section 3.2.4.3, 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 long durations of discharge at building loads as high as planned for the Project. Maximum discharging time is about five 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 on-site 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 meet the Project Objectives.

In addition, in order to provide 24-hour emergency backup electrical capacity, approximately 10 ISO containers representing approximately ten times the amount of real estate would be required. The Project Site would not accommodate the number of batteries necessary.

8.3.5 Fuel Cells – Backup Replacement

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 degrees Celsius 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 be 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 (e.g., Equinix, Apple, Yahoo) use Bloom Energy as a primary source and maintain their existing emergency diesel generation fleet as backup.
2. Fuel cells require approximately three times more space than the emergency generators proposed for the Project 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 on-site 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. LBA RVI-Company I, LP understands that there are pilot programs to scale this type of fuel cell to larger sizes. However, the issues that impair achievement of the Project Objectives with use 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. On-site storage of 48 hours of liquid hydrogen would take significant additional space not available at the Project Site.
4. The potential for on-site and off-site 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 San José and conflict with the San José International Airport Master Plan.

8.3.6 Fuel Cells – Primary Generation/Grid Backup

LBA RVI-Company I, LP 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 five 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 LBA RVI-Company I, LP's Project Objectives. The first is that it is unlikely that PG&E would procure and reserve the amount of electricity necessary to power the Project in perpetuity as a backup source on demand. The magnitude of electricity for such an event after full buildout of the Project would render such an option infeasible. Therefore, use of fuel cells as primary generation would not replace the need to install the proposed emergency backup generators in order to meet the Project Objectives.

Section 9.0 References

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HMH
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H. T. Harvey & Associates, Inc.
Biological Resources Consultants
Langan Engineering and Environmental Services, Inc.
Geotechnical Consultants
Partner Engineering and Science, Inc.
Hazardous Materials Consultants
Schaaf & Wheeler Consulting Civil Engineers
Hydrological Consultants

Section 11.0 Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AC	Alternating Current
ACM	asbestos-containing material
AI	Artificial Intelligence
Air District	Bay Area Air District
ALUC	Airport Land Use Commission
APN	Assessor Parcel Number
ATCM	Airborne Toxic Control Measures
BAAD	Bay Area Air District
BACT	Best Available Technology
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
Bay Area	San Francisco Bay Area
bgs	below ground surface
bhp	Brake horsepower
BMP	Best Management Practice
BPIP-PRIME	Plume Rise Model Enhancements to the EPA Building Profile Input Program
Btu	British thermal unit
CAAQS	California Ambient Air Quality Standards
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
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARE	Community Air Risk Evaluation
CBC	California Building Standards Code

CCR	California Code of Regulations
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
CI	Compression Ignition
CIC	Combined Industrial/Commercial
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalents
Commission	California Energy Commission
Construction General Permit	National Pollutant Discharge Elimination System General Construction Permit
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DC	Data Center
DEF	Diesel Exhaust Fluid
DNL	Day/Night Average Sound Level
dpf	Diesel particulate filter
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric Vehicle

FAA	Federal Aviation Administration
Facility	San José/Santa Clara Regional Wastewater Facility
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
General Plan	Envision San José 2040 General Plan
GHG	Greenhouse Gases
GHGRS	Greenhouse Gas Reduction Strategy
GWh	gigawatt hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HAC	Hot Ailse Containment
HMCD	Santa Clara County Hazardous Materials Compliance Division
HSP	Health and Safety Plan
HSWA	Hazardous and Solid Waste Amendments
HVO	Hydrogenated (or Hydrotreated) Vegetable Oil
I-280	Interstate 280
ibid	Same source as previous footnote
IGBT	Insulated Gate Bipolar Transistor
IP	Industrial Park
IP(PD)	Industrial Park(Planned Development)
IT	Information Technology
kV	Kilovolt
LBP	lead-based paint
lbs	pounds
LEED	Leadership in Energy and Environmental Design
L _{eq}	Energy-Equivalent Sound/Noise Descriptor
LID	Low Impact Development
L _{max}	Maximum A-weighted noise level during a measurement period
LORS	Laws, Ordinances, Regulations, and Standards
LOS	Level of Service

LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MEIR	Maximum Exposed Individual Residential Receptor
MEIS	Maximum Exposed Individual Sensitive Receptor
MEIW	Maximum Exposed Individual Worker Receptor
mgd	Million gallons per day
MLD	Most Likely Descendant
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mpg	miles per gallon
MRP	Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit
MSL	mean sea level
MTC	Metropolitan Transportation Commission
MVA	Mega Volt-Ampere
MW	Megawatt
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act of 1966
NO ₂	Nitrogen Dioxide
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NOD	Notice of Determination
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSJFMP	North San Jose Floodplain Management Policy
NSPS	New Source Performance Standards
NTBGF	North Town Backup Generating Facility

NTDC	North Town Data Center
NWIC	Northwest Information Center
O ₃	Ozone
PCB	polychlorinated biphenyls
PCR	Public Resources Code
PDA	Priority Development Areas
PDM	Project Design Measure
PFC	perfluorocarbon
PG&E	Pacific Gas & 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
PMI	Point of Maximum Impact
PPV	Peak Particle Velocity
PUE	Power Utilization Efficiency Factor
R&D	Research and Development
RAP	Removal Action Plan
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	San Francisco Bay Regional Water Quality Control Board
SB	State Bill
SCR	Selective Catalytic Reduction
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SHMA	Seismic Hazards Mapping Act
SJCE	San José Clean Energy
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO ₂	Sulfur Dioxide

SO _x	Sulfur Oxides
SPCC	Spill Prevention, Control, and Countermeasure Plan
SPPE	Small Power Plan Exemption
SR	State Route
SRA	State Responsibility Area
STEP	Siting, Transmission and Environmental Protection
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TCR	Tribal Cultural Resource
Title 24	Title 24, Part 6 of the California Code of Regulations
tpy	Tons per year
TSCA	Toxic Substances Control Act
UPS	Uninterruptible Power Supply
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGBC	US Green Building Council
Valley Water	Valley Water District
VMT	Vehicle Miles Traveled
VRF	Variable Refrigerant Flow
VTA	Santa Clara Valley Transportation Authority
Williamson Act	California Land Conservation Act
WUI	wildland-urban interface
ZNE	zero net carbon emission