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SECTION 3.0 REVISED PROJECT DESCRIPTION

Microsoft provides the following Revised Project Description to include the following modifications to Chapter 3 of the Small Power Plant Exemption (SPPE) Application (Project Description) filed with the California Energy Commission (CEC) in September 2022 for the San Jose Data Center Campus (Project or SJ04). The modifications to the original Project Description are shown in "track changes format" below to assist the CEC Staff in identifying the components of the Project that have been modified or added to the Project. Specifically, the modifications and additions to the original Project Description reflect the following:

- The footprint of the two buildings on the Project Site (as that term is defined below) have been rotated counter-clockwise approximately 4 degrees to achieve FAA issuance of Notices of Determination of No Hazard for the Project Site. The rotation also included a minor revision to the project fenceline. Where appropriate the Figures included in this section have been revised to reflect the rotation of the building footprints. No other changes to any aspect of the proposed buildings or site plan required modification in order to obtain the FAA Final Notices of Determinations, which are included in Appendix J.
- The lot line adjustment described in the original SPPE Application has been completed and therefore reference to it has been deleted and the Project Site acreage has been adjusted to include the additional acreage.
- Microsoft is proposing a minor modification to Project Design Feature PDF HAZ-1.1 to clarify the legal requirements for soliciting oversight and preparation of a Site Management Plan (SMP) from an agency in addition to the oversight by the City of San José.
- Pacific Gas & Electric (PG&E) has further analyzed its ability to serve the Project and determined that reconductoring of approximately 12 miles of some of its existing transmission line would be necessary in order to serve the Project. PG&E would construct and continue to own and operate the regional transmission line that will be reconductored. A full description of the proposed PG&E reconductoring work including the addition of two microwave communication towers, its associated construction activities, and the existing permit measures PG&E will implement during construction to minimize potential environmental impacts are included in Section 3.5 of this SPPE Application.
- The original Project Description has been reorganized to clarify the components of the Project that are within the "Project Site" and the components of the Project that are within the "Offsite Infrastructure Areas".
- Further details are provided for minor components of the project that were not available at the time of preparation of the original SPPE Application but have been discovered during further project design, responses to CEC data requests, or to address public comments.
- Two new diesel engine fire pumps have been added (one inside each of the two data center buildings).
- The fire water tank has been eliminated.
  The administrative backup generators have been upgraded from 500 kW CAT 15 to 800kW CAT 27 models with an engine exhaust discharge height of 60 feet above grade

3.1 OVERVIEW OF PROPOSED PROJECT

Microsoft Corporation (Microsoft) proposes to build the San José Data Center campus (Project or SJ04) to be located at the northwest corner of the intersection of Orchard Parkway and Component Drive in San José, California. The Project will include components that will be constructed within the Project Site as described in Section 3.3.1 and within the Offsite Infrastructure Areas as described in Section 3.3.9. The primary components of the Project that will be constructed on the Project Site include the following:

- Two four-story data center buildings, each encompassing approximately 315,429 gross square feet;
- Parking;
- Security fencing and guard house;
- Site access and entrances;
- Recycled ~~and fire~~ water storage facilities and associated single-story support structures;
- Project Substation;
- PG&E Switching Station and the transmission line interconnecting the PG&E Switching Station to the existing PG&E regional transmission line that crosses the Project Site;
- PG&E microwave communication tower to be located within the on-site PG&E Switching Station;
- Landscaping;
- On site Stormwater Treatment and conveyance features;
- On-site underground utility piping; and
- Emergency backup generating facilities incorporated into generator rooms within each data center building and within the water storage and treatment area.

The primary components of the Project that will be constructed within Offsite Infrastructure Areas include the following:

- An approximately 1.5 mile recycled water pipeline extension from the Project Site to the existing recycled water main at the intersection of Montague Expressway and Kruse Drive in the City of San José;
- Utility pipeline interconnections that extend from the Project Site boundary to existing potable water, sewer and storm drain infrastructure located within Orchard Parkway;
- Intersection improvements at the southwest and southeast corners of the Trimble Road and Orchard Parkway intersection;
- Funding of City of San Jose future improvements for: 1) a bike lane within the existing right of way for Orchard Parkway and immediately adjacent to the Project Site's eastern boundary; and 2) signaling at the intersection of the existing Orchard and Component Drive; and
- PG&E Reconductoring Project of approximately 12 miles of an existing PG&E's regional transmission line, including a microwave tower to be located within the Zanker Road Substation at the City of San Jose/Santa Clara Regional Water Treatment Facility.

For CEQA purposes, all of the project components to be constructed and operated on the Project Site together with all of the components to be constructed and operated within the Offsite Infrastructure

Areas are treated as the "Project". As described in more detail below, the PG&E Reconductoring Activities is included in this SPPE Application for the sole purposes of enabling the CEC to prepare a comprehensive CEQA analysis even though the CEC has no jurisdiction over PG&E or any aspect of the Reconductoring Activities.

The Project purpose and objectives and detailed descriptions of each of the Project components are provided in following sections.

3.2 PROJECT PURPOSE AND OBJECTIVES

Microsoft's specific Project objectives are as follows:

- Meet the continuing need for a data center to support the San José region's growing business and work force population as well as its growth as a center of innovation consistent with San José's planned land use vision.
- Construct and operate a data center that maximizes the use of the Project Site to house computer servers, supporting equipment, and associated administrative office uses in an environmentally controlled structure with redundant subsystems (cooling, power, network links, storage, fire suppression, etc.) and can be built in two phases to accommodate customer growth.
- Locate the data center on property long-planned for industrial uses that is in proximity to existing circulation and utility infrastructure, emergency response access, and on a site capable of being protected, to the maximum extent feasible, from security threats, natural disasters, and similar events.
- Design the proposed data center such that it can be provided with operational electric power via a new electric 115-kilovolt (kV) substation, and efficiently extend, connect to or otherwise install other utility infrastructure to adequately serve the Project, including water, storm drainage, sanitary sewer, electric and telecommunications, as well as new bike trail improvements.
- Ensure the data center achieves reduced access latency (defined as the time it takes to access data across a network).
- To incorporate the most reliable and flexible form of backup electric generating technology into the data center considering the following evaluation criteria:
    - **Reliability**. The selected backup electric generation technology must be extremely reliable in the case of an emergency loss of electricity from the utility.
        - The backup generating facility must provide a higher reliability than 99.999 percent in order for the data center to achieve an overall reliability of equal to or greater than 99.999 percent.

        - The backup generating facility 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 resilience so if any of the backup unit(s) fail due to external or internal failure, the system will have redundancy to continue to operate without interruption.
        - The data center must have an on-site means to sustain power for 48-hours minimum in failure mode, inclusive of utility outage.
    - **Commercial Availability and Feasibility**. The selected backup electric generation technology must currently be in use and proven as an accepted industry standard for technology sufficient to receive commercial guarantees in a form and amount acceptable to financing entities. It must be operational within a reasonable timeframe where permits, entitlements and approvals are required.
    - **Technical Feasibility**. The selected backup electric generation technology must utilize systems that are compatible with one another.
- Incorporate use of renewable fuels where feasible as primary fuel for backup generators.
- Incorporate, as feasible, environmentally sustainable features into the Project, such as bird-friendly building design components.

3.3 PROJECT FEATURES AND COMPONENTS

3.3.1 Project Site Description

The Project will be is located at the northwest corner of the intersection of Orchard Parkway and Component Drive in San José, California. The data center buildings; emergency backup generating facilities; project substation; water storage and treatment area; and the PG&E Switching Station, transmission lines and microwave communication tower would be located on APN 101-02-020[1], (hereinafter referred to as the "Project Site") which is approximately 22.24 acres.. As described in Section 3.3.9 below, the Project also includes the installation of infrastructure improvements, including: a recycled water line (the "Recycled Water Line") and other utility infrastructure, PG&E's reconductoring work (the "Reconductoring Activities"), and may include offsite intersection improvements These areas upon which the Infrastructure Improvements would be constructed together total approximately 42 acres, will be referred to collectively as the "Off-Site Infrastructure Areas." The Project Site and the improvements within the Offsite Infrastructure Areas together comprise the "Project". For purposes of a conservative CEQA analysis, it is assumed that all components described in this chapter will be part of the Project.

[1] The original SPPE Application described that the PG&E Switching Station would be located on a portion of APN 101-02-019 and that Microsoft had applied for a lot line adjustment. The lot line adjustment has been completed and the portion of APN 101-02-019 has been legally included into APN 101-02-020.

The Project Site has a General Plan land use designations of CIC-Combined Industrial/Commercial and IP-Industrial Park, and is zoned CIC Combined Industrial/Commercial. It is currently undeveloped with sparse grasses and a few trees along the western and northern boundaries. The Project Site is irregularly shaped and is generally bound to the north by an existing 2-story facility with office and manufacturing uses, to the south by an existing 5-story office facility, to the east by Orchard Parkway and undeveloped property and to the west by the Guadalupe Trail and Guadalupe River.

Parcels near the Project Site consist primarily of commercial and industrial land uses to the north, east and south. Uses to the west include the Bayshore Highway, approximately 500 feet west of the Project Site, and the Norman Y. Mineta San José International Airport, approximately 750 feet from the Project Site at the nearest point. The nearest residential area and the closest school are each approximately 0.8 mile to the north 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.

3.3.2 General Site Arrangement and Layout

The general arrangement and layout of the Project Site is shown on Figure 3.2-1. The two four-story data center buildings will cover the majority of the Project Site. A new substation and PG&E-owned and operated switching station and microwave tower will be located in the northeast corner of the Project Site. The recycled water storage tanks, ~~a fire water storage tank,~~ tank utility buildings and associated backup generators will be located in the northwest portion of the Project Site.

The primary access road will surround both buildings with surface parking located on the eastern side of the buildings. Potable water, recycled water, fire water, storm water and sanitary sewer pipelines will be interconnected to existing City of San José infrastructure located immediately adjacent to the Project Site within the existing right of way for Orchard Parkway. Recycled water will be provided from a new approximately 1.5-mile underground pipeline as described in Section 3.3.9.2 below.

3.3.2.1 *Site Access and Parking*

Primary access to the Project Site will be provided by a new entrance at Orchard Parkway, configured to allow for a truck turn around. The entrance will be secured and access to the facility will be monitored through a guard house. Pedestrian and bicycle turnstiles will be provided immediately adjacent to south side of the primary entrance. The secondary entrance is at the north boundary near the onsite substation and will be through an easement with the property immediately north of the Project Site. The secondary access will primarily be used for emergency access to the Project Site.

The City no longer requires off-street parking. The Project will provide approximately 145 parking spaces at full buildout

The Project will satisfy all applicable standards and requirements relating to spaces for Electric Vehicle, Clean Air and Vanpool (approximately 17 Electric Vehicle and 10 Clear Air / Carpool) in compliancewith applicable Cal Green requirements identified in Section 5.106.5 (Site Development – Non-Residential). The Project will provide 4 Class I long term, utilizing 2-double bicycle lockers and 14 Class II short term bicycle racks split between two locations with the Project Site.

3.3.3 Data Center Buildings

The Project will include two four-story data center buildings, each encompassing approximately 315,429 gross square feet. Each data center building will include a total of approximately 9,593 square feet of administrative space, which will house restrooms and shower facilities, storage areas, and loading docks. Figures 3.2-2 through 3.2-5 include the floor plans for each data center building, and Figure 3.2-6 shows the roof plan. Figures 3.2-7 and 3.2-8 provide building elevations. The proposed data center buildings will house computer servers for private clients in a secure and controlled structure. Each building will be designed for a maximum demand of 48.5 megawatts (MW) of electricity. In addition, the storage tank area will be designed for a maximum demand of 0.8 megawatts (MW) of electricity. The structures will be architecturally treated, as appropriate, to be compatible with the surrounding context of the Project Site and in coordination with the City of San José and consistent with applicable standards and guidelines. The buildings will be constructed of steel framing supporting concrete composite slab or mass timber with steel braced frames. Each building envelope will consist of a combination of Exterior Insulation Finishing System (EIFS), Insulated Metal Panels (IMP), and curtainwall glazing. The entries will include storefront glazing.

3.3.3.1 *Building Heights and Setbacks*

Each data center building will be approximately 101 feet at the roof's high point with parapet walls extending to a height of approximately 136 feet above the Level 1 slab height at the high point. The parapet/screen walls will extend to a height of approximately 40 feet above the roof level to conceal the rooftop mechanical and electrical equipment and provide sound attenuation.

Building SJ04 will be constructed on the southern portion of the Data Center Site and will be set back approximately 380 feet from the northern property line (at the nearest point); approximately 77 feet from the southern property line; approximately 142 feet from the western property line; and approximately 568 feet from the eastern property line and Orchard Parkway.

Building SJ06 will be constructed on the northern portion of the Data Center Site and will be set back approximately 88 feet from the northern property line; approximately 444 feet from the southern property line; approximately 156 feet from the western property line; and approximately 645 feet from the eastern property line and Orchard Parkway.

The distance between Building SJ04 and SJ06 will be approximately 126 feet.

3.3.3.2 *Building Cooling System*

Data Hall Cooling and Electrical Rooms

An indirect evaporative cooling (IDEC) system will be used to reject heat from the data center. Each data center room, called "Colos" (9.6 MW IT load), will be comprised of four cells or data halls (2.4 MW IT load per cell) and associated electrical rooms. The IDEC system will utilize hybrid closed-circuit fluid coolers mounted on the roof. Recycled water (makeup water) will be provided by the San José Municipal Water System (SJMWS). The fluid coolers will be capable of operating in dry mode to conserve water when the ambient conditions are conducive.

Cooling water from the fluid coolers will be pumped to indoor air handling units (AHUs) equipped with cooling coils. The units will be installed in dedicated mechanical galleries along the perimeter of the Colos. The AHUs will operate in 100% recirculation mode and conditioned air will be discharged directly into the rooms to cool the critical equipment (IT cabinets, uninterruptible power supply (UPS) systems, etc.). Warm air will be routed back to the AHUs using the suspended ceiling as a return air plenum.

The battery rooms will be conditioned using split-system direct expansion (DX) water-cooled AC units connected to the cooling water loop. There will be two AC units per battery room. AC units will utilize R410A refrigerant.

Outside air for ventilation and pressurization of the Colos will be provided by water-cooled DX packaged Dedicated Outside Air System (DOAS) units connected to the cooling water loop. There will be four DOAS units per 9.6 MW Colo, all of which will utilize R410A refrigerant.

Administration Area

The Administration (Admin) area will be conditioned by variable refrigerant flow (VRF) DX system. It will be comprised of outdoor condensing units mounted on the roof and indoor fan coil units. The system will incorporate heat recovery to save energy by transferring heat from zones requiring cooling to zones requiring heating. There will be eight condensing units on the roof, all of which will utilize R410A refrigerant.

Ventilation will be provided by an air-cooled packaged DX DOAS unit mounted on the roof. The unit will incorporate an energy wheel to recover energy from the exhaust airstream and precondition the outdoor air.

3.3.3.3 *Energy Efficiency*

The data center industry utilizes a metric called Power Usage Effectiveness (PUE) to estimate the efficiency of its data centers. For purposes of the Project, its PUE is calculated by dividing the total demand of the data center by the Critical IT load as shown in below. A lower PUE signifies a more energy efficient design than a higher PUE. The Project is expected to achieve an average PUE of 1.20 and a peak PUE of 1.27 based on conformance with applicable local, state, and federal energy efficiency building code requirements and standards. The Project's peak operation PUE estimate of 1.27 is based on design assumptions relying on reasonably available information and represents

conservative assumptions; that is, the hottest day with all server bays occupied and all servers operating at 100 percent capacity. The Project's more realistic PUE, based on annual average site temperatures and less than maximum power loads, will not exceed 1.20. This is significantly lower than the data center industry average PUE of approximately 1.6.

The Project will be built in accordance with applicable provisions of the current California Green Building Code and will include a number of green building measures to reduce energy consumption such as:

1. limiting mechanical refrigeration needs and lowering the required refrigerant volume, as feasible;
2. utilizing lighting control and energy-efficient lighting to reduce energy usage;
3. building insulation improvements; and
4. incorporating a cool roof design, using reflective surfaces to reduce heat gains.

In addition, the Project will pursue LEED v4 BD+C Gold certification for Data Centers.

3.3.3.4 *Generating Capacity*

Overview

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

1. The backup generating facilities will use internal combustion engines and not turbines.
2. The backup generating facilities through software technology and electronic devices will be controlled exclusively by the data center buildings.
3. The backup generating facilities have been designed with a distributed 4-to-make-3 redundancy system, as described below. Each system of four generators will serve one of the building floors as described in Section 3.3.4 below.
4. There will be a total of 8 data center generators which are redundant.
5. There will be a total of 2 administrative generators (one for each building) to provide electricity during emergencies to support the administration portion of the buildings and features necessary for emergency response.
6. There will be a total of 2 generators in the water storage tank yard to provide electricity during emergencies to support recycled water treatment and delivery requirements of the cooling of the data center.
7. The backup generating facilities will only be operated for maintenance and testing, no more than 50 hour per year per generator engine and during emergency utility power outages.

8. The backup generating facilities will only operate at a load equal to the demand of the data center buildings during an emergency utility outage.
9. The backup generating facilities will only be interconnected to the data center buildings and will not be interconnected to the transmission or distribution grid.

Project Capacity and PUE

Based on the methodology recently adopted by the Commission's Final Decisions Granting SPPEs for the last five Data Center Backup Generating Facilities, the maximum generating capacity of the Project is determined by the maximum capacity of the load being served.

The design demand of the Project, which the backup generating facilities have been designed to reliably supply with redundant components during an emergency, is based on the maximum critical IT load and maximum mechanical cooling electrical load occurring during the hottest hour in the last 20 years. Such conditions are possible but extremely unlikely to occur. The Project load on that worst-case day will be 97.8 MW.

It is important to understand that the Project will be designed to accommodate the full IT equipment load of the data center facilities. However, in Microsoft's experience it is rare that the total design load is reached. This typically results in data center demand loads of approximately 60 to 80 percent. Therefore, a fully utilized 97.8 MW data center would only reasonably be expected to reach a demand load around 59 to 78 MW.

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 would be 1.27 (Total 97.8 MW demand of Building[2] on Worst Case Day divided by 76.8 MW Total Critical IT Load). The average annual PUE would be 1.20 (Total 92.2 MW demand of Building average conditions divided by 76.8 MW Design Critical IT Load). These PUE estimates are based on design assumptions with the buildings at full capacity and historical weather data.

3.3.4 Backup Generating Facilities and Electrical System Design

3.3.4.1 *Overview*

The emergency backup generators system will include a redundant 4-to-make-3 design topology for the critical IT load. Each floor of each of the buildings will be supported by a set of four diesel-fired emergency backup generators. The 4-to-make-3 topology means that the design demand of each floor can be met with only three of the four generators, essentially allowing for each floor to be fully served even if one of the four generators failed.

The emergency backup generators system for the water storage tank yard will include a redundant 2-to-make-1 design topology for the water storage tank yard mechanical loads. The 2-to-make-1

[2] Includes electricity for servers, mechanical load, recycled water treatment facilities and cooling load, and ancillary building loads.

topology means the design demand for the water storage tank yard can be met with only one of the two generators, essentially allowing for the water storage tank equipment to be fully served even if one of the two generators failed.

Main low-voltage (480 Volt) switchboards will be configured with a utility main circuit breaker and generator main circuit breaker. Automatic transfer controls will be provided to facilitate the transfer of the electrical power supply from utility to generator in the event of an undefined number of potential events that could impact PG&E's service (resulting in a loss of power or degradation of power quality). The utility main breaker and generator main breaker are electrically interlocked such that for each main switchboard, only the utility source or generator source can be connected. When the PG&E utility service is outside of pre-determined tolerances, the automatic transfer controls send a signal to start the generators and perform an open transition (break-before-make) between the utility main breaker and generator main breaker.

Each building's emergency backup generators will be supported by a UPS system consisting of a rectifier, batteries, an inverter, and switches to facilitate the uninterrupted transfer during the open transition of electrical power supply from the utility to the generators in the event of an undefined number of potential events that could impact PG&E's service (resulting in a loss of power or degradation in power quality), which triggers the starting of the generators.

The UPS system will include either lithium-ion or valve regulated lead acid (VRLA) battery banks, with each bank capable of providing up to 10 seconds of backup power at 133 percent load and 1 minute of backup power at 100 percent load. The administrative UPS system will include either lithium-ion or VRLA battery banks, with each bank capable of providing up to 10 minutes of backup power at 100 percent load.

When the electrical source input to the UPS is outside of pre-determined tolerances (+10 or -15 percent of alternating current nominal voltages or a frequency range of 60 Hertz plus or minus 5 percent), the UPS will transfer over to its associated battery source for uninterrupted power to the critical loads while the upstream transfer controls start the generator. The UPS load transfer from PG&E to UPS battery power occurs within 5 milliseconds. Load then transfers from the UPS battery system to the standby generators within 20 seconds of generator start. The UPS inverter conditions the power supply and provides 'clean' utility power for critical loads (IT equipment, fire/security and building management systems, and some small 120-volt circuits).

The major mechanical systems, lighting, and general receptacles are not powered from the UPS sources.

3.3.4.2 *Backup Generator System Description*

The backup generating facilities will include a total of thirty-six (36) emergency backup generators. Sixteen (16) 3,000 kW critical IT generators and one (1) 8~~5~~00 kW administrative generator will be located within each building. Two (2) 800 kW generators will be located at the water storage tank yard. The 3,000 kW data suite generators will be Caterpillar Model C175-16, the 8~~5~~00 kW

administrative generators ~~will be Caterpillar Model C15, and~~ the 800 kW water storage tank yard generators will be Caterpillar Model C27. The generators proposed for installation are made by Caterpillar, with a Tier 4 compliant rating (Tier 2 certified with SCR, DPE and oxidation catalyst). These engines will be equipped with diesel particulate filters (DPF) to reduce the diesel particulates to less than or equal to 0.02 grams/brake horse-power hour (g/bhp-hr), 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 BAAQMD BACT.

~~The one (1) 500 kW administrative generator located within each building may need to be increased to 800kW later in the Project as part of final design. If this refinement occurs, the two (2) 800 kW generators would be reduced to 500 kW. To account for this potentiality, the air quality and environmental noise studies conservatively assumed that one 800 kW generator would be located in each building and that both generators in water storage tank yard would be 800 kW.~~

Specification sheets for each manufacturer are provided in Appendix A-1.

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 PLC transfer controller located in the 480-volt main switchboard located within the data center buildings. Each generator will be controlled by a separate, independent transfer controller. 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 transfer controller has returned the utility to the active source of power serving the computer and mechanical loads within the data center buildings.

As discussed above, all of the critical IT emergency generators will be located in generator rooms located on each floor of each building (See Figures 3.2-2 through 3.2-5). The location of the generators in the water storage tank yard are shown on Figure 3.2-9. The administrative generators will be located on the second floor in the administrative area of each building.

3.3.4.3 *Fuel System*

The backup generators will use either renewable diesel as primary fuel when available or ultra-low sulfur diesel as a secondary backup fuel if renewable diesel is unavailable (<15 parts per million sulfur by weight). See Project Design Measure PDF GHG-1.2.

Each data center building will have four 50,000-gallon underground fuel storage tanks (USTs). Two USTs will be located north of each building to serve the generators on that side of each building. Another two storage tanks will be located south of each building to serve the generators on that side. See Figure 3.2-9.

Each 3,000 kW generator serving the Colo Cell (2,400 kW IT load) will have a 500-gallon 'Day Tank' that will receive fuel from the USTs to replenish its capacity. The 85~~5~~00 kW administrative generator will have a 250-gallon day tank that will also be served by the USTs. In addition to the fuel day-tanks, each generator will have diesel exhaust fluid (DEF) tanks for emissions aftertreatment.

The two 800 kW generators adjacent to the water storage tanks will be installed in pre-fabricated enclosures with dedicated sub-base 'belly' tanks. Each sub-base tank will have an approximate capacity of 3,500 gallons.

Each fuel tank will be of double-wall construction. The interstitial space will be continuously monitored for leaks. Underground piping will also be of double-wall construction with interstitial leak detection. Upon detection of a leak, the fuel transfer process will be disabled, and an alarm generated at the building monitoring system will alert the operations team so that it can be appropriately and promptly remedied.

3.3.4.4 *Electrical Distribution Facilities*

As part of the Project, Microsoft will construct a new on-site substation to be connected to PG&E's 115kV electrical distribution system. The on-site substation will be owned and operated by Microsoft. Interconnection of the new on-site substation to the PG&E distribution system will be through a new PG&E-owned and -operated switching station.

The new PG&E on-site switching station will be located immediately adjacent to the on-site substation and will be designed and constructed to applicable PG&E standards. The proposed PG&E switching station will be within the project site boundary and will encompass approximately 82,000 square feet. The proposed switching station will interconnect the new PG&E distribution system to the existing PG&E Trimble Substation and the existing PG&E Newark Substation.

The new switching station will be configured in the breaker-and-a-half arrangement with two bays of three breakers each. Two sets of overhead aluminum conductor steel-reinforced cable (ACSR) conductors will interconnect the PG&E switching station with the Microsoft substation. The switching station will have direct access from Orchard Parkway.

PG&E metering equipment will be constructed in the Microsoft substation with manual disconnect on the line and load sides of the equipment. In addition, a PG&E meter and relay building will be constructed near the metering equipment. This building will be adjacent to the Microsoft substation and will have direct access from a public right-of-way.

The new Microsoft substation will consist of two 115kV-34.5kV step-down transformers to provide fully redundant electrical distribution to the data center buildings. Each transformer will be protected by a primary breaker and a secondary main breaker in the 34.5kV switchgear located within the substation. The new Microsoft substation will encompass approximately 50,000 square feet.

3.3.5 Landscaping

The Project proposes to remove approximately eighteen (18) on-site trees (located within the City of San José), ten (10) of which are ordinance size pursuant to the City of San José Tree guidelines as defined by San José Ordinance Title 13 (Streets, Sidewalks and Public Places), Chapter 13.28 (Tree Removal Controls).

Additionally, three (3) street trees will be removed to allow for site access along Orchard Parkway. As part of the right-of-way improvements along Orchard Parkway, the city may require the remaining ten (10) street trees to be removed and replaced in new tree wells installed in the proposed sidewalk, for a potential total of thirteen (13) removed street trees. No trees would be removed in the paved portions of the Infrastructure Improvement Areas.

The trees that are removed will be mitigated pursuant to applicable City standard mitigation requirements with new trees on site as part of the landscape design and as summarized in the table below.

Table 3.3-1: Tree Removal and Replacement				
Tree Removal				
	Circumference	Quantity Removed	Replacement Ratio – Size	Replacement Quantity Required
Total Native Trees to be Removed	<19 inches	2	1:1 – 15-gallon*	2
	19-38 inches	4	3:1 – 15-gallon	12
	>38 inches	9	5:1 – 15-gallon	45
Total Non-Native Trees to be Removed	<19 inches	1	1:1 – 15-gallon	1
	19-38 inches	1	2:1 – 15-gallon	2
	>38 inches	1	4:1 – 15-gallon	4
Tree Replacement				
Total Trees Required to Meet Replacement Requirements (approx.)			66 (15-gallon)	
Total Proposed Trees (Not Including Street Trees) (approx.)			150 (15-gallon)	
* A 24-inch box tree = two 15-gallon trees				

The removal and replacement of street trees will require coordination with the San José Department of Transportation and the City Arborist. Please see Section 5.2.1 below for a discussion of the site trees and City of San Jose requirements. PDF BIO-4.1 has been proposed to ensure compliance with the applicable City of San Jose requirements.

The landscape design will consist of climate adaptable trees, large and medium shrubs, and groundcovers that will be installed along the property boundaries, building perimeters and landscape beds distributed throughout the Project Site. Stormwater treatment facilities will be planted with vegetation recommended in the Appendix D section of the C.3 Stormwater Handbook. Trees will be planted pursuant to the applicable City of San José recommended utility clearances, five feet away from underground utility lines, utility cabinets, and fire hydrants, and ten feet away from sewer lines, storm drain lines and commercial driveways, and twenty feet away from streetlights and stop signs.

3.3.6 Stormwater Controls

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued the Municipal Regional Stormwater NPDES Permit (MRP) to regulate stormwater discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 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 that will be incorporated as part of the Project are intended to maintain or restore the Project 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 Project proposes to construct stormwater treatment areas consisting of multiple LID bioretention areas and flow through planters totaling approximately 31,000 square feet, based on preliminary impervious surface calculations, sized according to the applicable requirements of the MRP. Other areas of the Project Site will be landscaped with self-treating or self-retaining areas. The stormwater treatment areas will be located adjacent to site roadways, in landscape areas adjacent to sidewalks, buildings, and other impervious surfaces, and around the perimeter of the Project Site.

In the existing condition, the Project Site is currently undeveloped and there do not appear to be any existing on-site drainage facilities. The Project Site is dirt and vegetation, so it is assumed that the majority of stormwater infiltrates into the soil. The lowest portion of the Project Site is along Orchard Parkway at the northern property line, so any runoff from larger storm events would release from the Project Site at this point.

The proposed Project will install three new storm drain laterals on the Project Site's Orchard Parkway frontage. These proposed laterals will tie into the existing 96" main that runs along Orchard Parkway. All runoff from the Project Site is anticipated to discharge into these laterals after passing through the appropriate C3 treatment measures (bioretention areas, flow through planters and self-retaining areas).

Downspouts for the roof drainage will discharge directly into bioretention areas, or indirectly into bioretention areas through the use of bubbler systems. In some cases, roof drainage will be piped under sidewalks and discharged to the pavement surface where stormwater will then surface flow to at-grade bioretention planters located along the perimeter of the Project Site.

Proposed bioretention areas will not have impermeable liners separating the bioretention soils from the underlying native soils. Therefore, stormwater will have an opportunity to infiltrate into the ground once it enters the bioretention areas. Perforated underdrain systems will be included in the bioretention areas to allow water that does not infiltrate through the bottom of the bioretention path to the public storm drain system. Overflow risers will also be included in bioretention areas to allow storm events larger than the C3 design storm to bypass the bioretention and enter the public storm drain system directly.

According to Appendix E-2, HMP Applicability Map, of the "C.3 Stormwater Handbook" published by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) the Project Site is located in a "red area", defined as catchments and subwatersheds greater than or equal to 65% impervious. According to the MRP, hydromodification controls (HMC) are not required for projects located in red areas of the HMP Applicability Map. Therefore, the Project will not incorporate HMC into the Project's development.

3.3.7 Flood Potential

Flood elevations and requirements for the Project Site are given by two separate entities, FEMA and the North San José Flood Management Policy (NSJFMP), as the Project Site is located within the boundaries of the NSJFMP. NSJFMP flood elevations are more restrictive, so they will govern the site design.

Based on the FEMA Flood Insurance Rate Map (FIRM), most of the Project Site lies within flood zone "X" defined as an area with 0.2 percent annual chance flood hazard. A portion of the Project Site lies with flood zone "AH" with a given base flood elevation of 27'.

Flood elevations from the NSJFMP vary between 29' and 31' for the Project Site.

Since these flood elevations are higher than those given by the FIRM, they govern the building finish floor elevations which are to be set at least 1 foot higher than the flood elevation. In addition, the NSJFMP requires that a minimum of 25% of the Project Site be at a lower elevation than the existing back of walk for any section through the Project Site taken perpendicular to the flood conveyance path (generally perpendicular to North 1st Street).

To comply with this requirement, the finished grades of approximately the westernmost third of the Project Site will be graded to not exceed the existing back of walk elevation, essentially maintaining existing topography. This means that the western portion of the Project Site will act as a flood conveyance path extension of Orchard Parkway and will allow for shallow floodwaters to pass through the Project Site.

3.3.8 Southern Bike Trail Extension

The Project will include the creation of a Class I bike path along and within the Project's southern property line. This bike trail will extend from the intersection of Orchard Parkway and Component Drive to edge of the Project Site's southwestern property line near the existing Guadalupe Bike Trail as shown on Figure 3.2-11 – Bike Path Study. This Class I bike trail will help facilitate achievement of the planned regional Guadalupe Bike Trail by installation of this segment.[3]

3.3.9 Offsite Infrastructure Areas

As described more fully below, the Project involves the installation of offsite utility infrastructure and potential intersection improvements to serve the Project. These improvements will be located within the Offsite Infrastructure Areas. The total amount of off-site ground disturbance as a result of installation of the proposed Offsite Infrastructure Improvements is estimated to be approximately 42

[3] Final interconnection of this regional trail (which is not on land owned by Microsoft) from the Data Center Site's southwest property line to the Guadalupe Bike Trail may occur in the future as part of a separate project pursued by those with the authority over the levee property between the Guadalupe Bike Trail and Data Center Site in adherence with all applicable laws and regulations.

acres. Of the estimate of approximately 42 acres of total disturbance from work that is offsite, approximately 2 acres is estimated for the Recycled Water Pipeline (described in Section 3.3.9.2), minor utility interconnections from the Project Site boundary to the existing sewer, water and storm water infrastructure located within Orchard Avenue (described in Sections 3.3.9.1), and the potential improvements at the intersection of Orchard Avenue and Trimble Road (described in Section 3.9.3). The PG&E Reconductoring Activities will take place within the existing regional transmission line easement currently accommodating several large regional transmission lines. As described in Section 3.4 below, the specific locations of ground disturbance is not yet available from PG&E and therefore the area of ground disturbance has been conservatively estimate to occur anywhere within the easement area, when the actual disturbance area will confined to only those electrical cable pull-sites and staging areas and those areas where existing poles or towers may need to retrofitted or replaced. The conservative estimate is approximately 40 acres and for purposes of the CEQA analysis when added to the estimates from the other Offsite Infrastructure Areas and rounding up, the total disturbance acreage is estimated to be approximately 42 acres

Detailed descriptions of the Project features that will be constructed in the Offsite Infrastructure Areas are provided below. The PG&E Reconductoring Activities is described in Section 3.5

3.3.9.1 *Water, Sewer, and Fiber Underground Interconnections*

The Project will include new domestic and fire water, sanitary sewer and fiber interconnections. These services will be made via the installation of new underground pipes and conduit extending from the Project Site Boundary to existing City infrastructure systems within Orchard Avenue. All of the existing City infrastructure is located within existing public roadways.

The fire water tank has been eliminated from the water storage.

The Project will install two new diesel engine fire pumps (John Deere JU4H-UFAD5G). The pumps will be 104 KW and will have a Tier III emissions rating. One fire pump will be installed in each building and each pump will have a stack height of 60 feet.

3.3.9.2 *Recycled Water Pipeline*

Recycled water will be used to serve the Project for landscaping and cooling purposes. There is no existing recycled water service to the Project Site. The Project will include the construction of a new recycled water pipeline extending from the Project Site to the existing recycled water main at the intersection of Montague Expressway and Kruse Drive in the City of San José. Specifically the pipeline route will start at the intersection of Montague Expressway and Kruse Drive and will continue south on Montague Expressway, turn southwest onto Trimble Road, and then turn south onto Orchard Parkway towards the Project Data Center Site. This route will require approximately 1.5 miles of new recycled water main all within public rights ways and/or existing paved roadways.

Please reference Figure 3.2-10 - Proposed Recycled Water Extension for a visual depiction of the proposed route.

3.3.9.3 *Trimble and Orchard 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 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 and will be considered in the Project's CEQA analysis.[4]

The intersection improvements will consist of the removal of the existing pedestrian refuge ('porkchop') islands at the southwest and southeast corners of the intersection, relocation of the existing traffic signal poles from the refuge islands, and the modification of the existing traffic signal system.

These improvements will not be required as a mitigation pursuant to CEQA to offset any identified impacts associated with the Project. Rather, the City and other local agencies often condition 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.

3.4 CONSTRUCTION AND OPERATION

3.4.1 Site Grading, Excavation, and Construction Phasing

Site grading, excavation and construction may either be conducted in two phases with a separation of activities between Phases I and II (Phased Construction Scenario), or the entire Project conducted continuously (No Phase Scenario).

3.4.1.1 *Phased Construction Scenario*

The Phased Construction Scenario will take place in two phases. Phase I will include grading of the entire Project Site; installation of all on-site utility services including interim power; construction of the on-site substation, PG&E switching station, and on site transmission lines; construction of the recycled water pipeline, storage tanks and treatment facilities; construction of potable and sewer interconnections; paving the roadways and parking for the first building (SJ04); and construction of the first building. Phase II will include completing the paving for the parking and construction of on-site utilities for the second building (SJ06) and construction of the second building.

[4] However, it is important to note the City is also including this same Condition of Approval on the Site Development Permit (file H22-021) associated with the property at the southwest corner of West Trimble Road and Orchard Parkway (the property immediately north of the Project). 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 Project Design Feature, though the improvements may actually be pursued by the sponsor for the neighboring project.

Phase I activities are anticipated to begin in January 2025and take approximately 25 months to complete. Phase I will include a construction workforce with a peak number of workers of approximately 84 per month and an average of approximately 51.1 per month. Phase II construction will begin as soon as commercially feasible, likely in 2027 and take approximately 25 months to complete. Phase II construction workforce is estimated to have a peak number of workers of approximately 50 per month with an average of approximately 30.8 per month.

3.4.1.2 *No Phase Construction*

It is possible that that entire Project would be constructed without phasing. For this scenario, construction is anticipated to begin in January 2025 and would take approximately 50 months to complete. The construction workforce is estimated to have a peak number of workers of approximately 84 per month and an average of approximately 51.1 per month.

3.4.1.3 *Construction Worker Parking and Stating Areas*

Construction worker parking and staging areas will be off-site at an existing commercial property parking lot located at 2825 Lafayette Street, approximately 1.9 miles from the Project Site. Bus transportation between the Project Site and the off-site parking will be provided by the Project.

3.4.1.4 *Export Material*

[For purposes of this analysis and based on reasonably available information, it is conservatively assumed that up to 106,067 cubic yards of soil and undocumented fill will be removed from the Project Site including potential soil remediation export (if required) and disposal of excess soils associated with construction of the Recycled Water Pipeline. Grading for the Project is not anticipated to require the import of fill material. Other Infrastructure Improvements are not anticipated to require exportation of fill material. PG&E's Reconductoring Activities (as described below) are not anticipated to require exportation of fill material.

3.4.1.5 *Excavation Depths*

On-site utility trenching is expected to vary between 4 and 15 feet deep. The buildings will use a deep foundation system with piles. The piles are anticipated to extend approximately 80 feet below the existing grade surface. Off-site trenching for the Recycled Water Pipeline is expected to be approximately 5 feet deep.

3.4.2 Site Water Supply and Use

Site Grading and Construction. Grading and construction of the Project is estimated to utilize approximately 1.75 acre-feet of water over the 25-month construction period for Phase I and a similar approximately 1.75 acre-feet of water over the 25-month construction period for Phase II for the second building and related improvements. For the non-phased constriction scenario it is estimated that the Project could use up to approximately 3.5 acre-feet over the 50 month construction period.

Operation. The Project will require recycled water during most of the year to cool the buildings via the adiabatic cooling system. The data center will be designed to use up to a total of approximately 680 acre-feet per year (AFY) of recycled water for mechanical cooling and approximately 10.2 AFY of recycled water for site irrigation from South Bay Water Recycling (SBWR). Two ~~O~~on-site recycled water storage tanks will be installed as a back-up water source when recycled water is not available from the utility. The recycled water tanks will be located in the water storage and treatment area and will be approximately 80 feet in diameter and 32 feet high. The Project is estimated to use approximately 1.35 AFY of potable water.

A Water Supply Assessment (WSA) pursuant to SB 610 requirements was completed for the Project in August 2022 (refer to Appendix J). The WSA determined that sufficient potable and recycled water supplies are available to serve the Project.

3.4.3 Waste Management

Construction- and demolition-related waste, similar to construction and demolition for comparable projects, will be generated, managed, and disposed of consistent with applicable laws and regulations, as described in Sections 4.9 and 4.19. Given the data center nature of the proposed uses, significant quantities of waste materials would not be generated during operation of the Project.

The primary waste from the Project will be clear water discharge from indirect evaporative heat rejection equipment on the roof (fluid coolers). Recycled water will be used for evaporative heat rejection when the ambient conditions are not conducive for sensible heat rejection.

The recycled water will be recirculated and sprayed on the wet coils of fluid coolers. A portion of the spray water will continuously evaporate as the data center heat is rejected at the fluid coolers. This evaporation process increases the mineral content in the recirculated spray water. Excessive mineral content can have a negative impact such as scaling of the fluid cooler heat transfer surfaces. A portion of the spray water will be continuously discharged to the sanitary system (blowdown) and replaced with recycled water to alleviate this condition.

Makeup water = Evaporation + Blowdown (neglecting drift). The ratio of makeup water to blowdown is called cycles of concentration (CoC). CoC can also be defined as the ratio of total dissolved solids (TDS) concentration or conductivity of recirculated spray water to the TDS or conductivity of recycled water. Based on quality of recycled water, the Project design will be based on CoC of 4.

The San José Public Works Department has evaluated the calculated clear water discharge and has confirmed that the existing sanitary pipe that will serve the Project and the overall sanitary system has the capacity to serve the calculated load. See City Correspondence in Appendix K.

3.4.4 Hazardous Materials Management

The Project will prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan pursuant to applicable laws and regulations to address the storage, use and delivery of renewable diesel and diesel fuel for the generators.

Diesel fuel will be delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of 8,500 gallons.

For the bulk fuel storage tanks serving the buildings, the tanker truck will park on the access road located just above the underground fuel storage tank along the northwest and southeast sides of the buildings and will connect a fuel fill hose to a fill port located in the ground just above the underground fuel storage tank.

For the fuel storage tanks located in the base of the two generators located in the tank area, the tanker truck will park near the generators and will extend a fuel fill hose through hinged openings in the security fence surrounding the tank area.

There are no loading/unloading racks or containment for re-fueling events; however, a spill catch basin will be located at each fill port at the bulk underground diesel storage tanks and for the base mounted diesel storage tanks. 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 of diesel fuel coming in contact with stormwater, to the extent feasible, fueling operations will be scheduled at times when storm events are improbable.

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.
Diesel Exhaust Fluid (DEF) is used as part of the diesel engine combustion process to meet the emissions requirements. DEF will be stored in two (2) 55-gallon storage drums located within the outdoor generator enclosures in the water storage tank area. DEF storage will be filled in place from a fill port on the outside of the generator enclosure.

DEF will be stored in a 550-gallon storage tank located adjacent to each generator for the generators installed within the buildings. Fill ports will be located at the exterior of the buildings and will connect to a tank fill systems located in four locations within the buildings.

3.4.5 Backup Generating Facilities 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.

BAAQMD's Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance), and the Project will adhere to the foregoing requirements.

3.4.5.1 *Routine Maintenance and Testing Schedule*

Annual, quarterly and monthly functional tests will be performed on each generator to verify that the generators are functioning properly. For the annual test (performed once per calendar year), each generator will be run at 100% load on a load bank test unit for approximately 2 hours. For the quarterly test (performed three times a year), each generator will be run at 100% load on a load bank test unit for approximately 30 minutes. For the monthly test (performed eight times a year), each generator will be run unloaded for less than 30 minutes. Routine maintenance will be performed during the annual and quarterly test events.

3.4.5.2 *Emergency Operations*

In addition to running the generators for routine maintenance and periodic testing, as described in the previous section, the generators will run when power is interrupted from PG&E.

The Project will derive power from the PG&E Trimble Substation and the PG&E Newark-Lawrence Substation. The Project will not experience an interruption of power as long as either of the two substation sources is available.

Over the last 10 years, the PG&E Trimble Substation has recorded the following power outages:

Outage Date	**Start of Outage**	**Duration of Outage**
02/04/18	01:42PM	103 Minutes
04/04/18	02:43PM	60 Minutes

Source of Information: PG&E internal records.

Over the last 6 years, the PG&E Newark-Lawrence Substation has recorded the following power outages:

Outage Date	**Start of Outage**	**Duration of Outage**
03/11/16	12:14PM	19 Minutes
12/22/16	05:11PM	24 Hours 21 Minutes
04/15/17	12:11PM	108 Minutes
07/08/17	09:01AM	1 Minute
09/27/17	09:06AM	75 Minutes

01/18/20	04:11PM	81 Minutes
08/16/20	07:29AM	1 Minute
06/13/21	12:19AM	31 Minutes

Source of Information: PG&E internal records.

Based on this information, the Project would not have experienced a utility power interruption over the last 10 years because one of the two substation sources of power have been available during this time. If this pattern were to hold true for first 10 years of the Project's operation, it is not expected that the backup generating facilities would be required to run due to a utility power outage. Therefore, emergency operation of the emergency generator facilities is anticipated to be infrequent and is not foreseeable.

3.5 PG&E RECONDUCTORING ACTIVITIES

In order to timely supply the electricity for the needs of the Project, PG&E has determined that upgrades to its existing electrical transmission network are necessary. Specifically, PG&E has identified an approximately 12-mile portion of the existing 115 kV power line between Newark Substation and Trimble Substation that will require reconductoring. Although detailed design has not been completed, it is likely that PG&E will also determine the need to replace or modify individual structures along this line to support the heavier conductors. Reconductoring Activities are herein treated as part of the Project for purposes of CEQA review. It is important to note that to avoid potentially sensitive cultural resources, PG&E has provided Figure 3.3-15, to show that no work will be performed within the identified areas and flagging will be used as necessary for work near the identified areas to protect the resource. Figure 3.3-15 will be submitted under separate cover pursuant to a Request For Confidentiality.

3.5.1 Existing Newark-Trimble 115 kV Power Line

PG&E's Newark-Trimble 115 kV Power Line is located in established transmission corridors within the Cities of Fremont, Santa Clara and San Jose. The vast majority of the line, which is co-located on the same structures with a second line (circuit), is located adjacent to one or more other single- and double-circuit transmission lines as shown on Figures 3.3-16 and 3.3-17. A portion of the line crosses a creek, river and other bay-related water features and salt marsh. Another portion of the line is within a highly urbanized environment.

The Newark-Trimble 115 kV Power Line extends from PG&E's existing Newark Substation, located west of the intersection of Auto Mall Parkway and Nobel Drive in the City of Fremont, to the Trimble Substation located at 44467 Component Drive in the City of San Jose. The line is entirely above ground and supported on lattice steel towers or steel monopole structures referred to as tubular steel poles (TSPs).

The existing 115 kV line leaves the Newark Substation to the south and then travels east in a transmission corridor with other, parallel transmission lines. The transmission lines are supported on lattice steel towers located approximately 800-1000 feet apart. The Newark-Trimble line is the northerly of the two lines. Both lines turn to the southeast and cross Coyote Creek, where they turn directly south. The Newark-Trimble line is located to the east of the other existing double-circuit transmission lines. The lines again cross Coyote Creek and enter Santa Clara County, cross a body of water into the City of San Jose, and bear to the southwest eventually running parallel to Grand Boulevard. The two lines separate on the north side of the Guadalupe River near the Guadalupe Trail, where the Newark-Trimble 115 kV line bears slightly to the east and crosses the Guadalupe River. The line then continues southwesterly across a railroad line with a sharp turn to the southeast near America Center Court.

At this turn, the 115 kV Newark-Trimble line joins another double-circuit electric line located to its south and is supported on TSPs. The line runs parallel to the southern side of an existing railroad line and Lafayette Boulevard and continues southeasterly across State Route 237. The line makes a sharp turn to the southwest at Silicon Valley Power (SVP) Northern Receiving Station. The line travels along the southern end of the SVP Northern Receiving Station in a transmission corridor and, at the southwestern corner, turns sharply to the southeast. This portion of the line is in a transmission corridor within a residential area and is supported on lattice steel towers. The line crosses Montague Expressway and then turns northeast just south of the intersection of Norman Avenue and Leonard Court in an industrial parking lot. The line continues northeast within Laurie Avenue and then in a dedicated transmission corridor until it crosses De La Cruz Avenue, where it turns sharply to the southwest. The line continues within Edward Avenue until it crosses the Guadalupe River and West Trimble Road, continuing across the southwestern portion of the Project Site. The line turns sharply to the northeast at the southwest corner of the Project Site. The line continues northeast supported on TSPs located in an existing parking lot and through Component Drive, past Orchard Parkway, until it turns into the south side of Trimble Substation.

3.5.2 Description of Reconductoring Activities

The design work to reconductor the 115kV Newark-Trimble Line is ongoing and will include estimating the loads from the new conductor as well as the capacity of the existing towers and poles to handle those loads based on the latest design criteria. This may mean that some of these towers and poles will need to be modified or replaced. PG&E will replace the existing 715 all aluminum conductor (AAC) with a higher-capacity conductor. Preliminary analysis based on reasonably available information indicates that the existing structures may be able to support the new conductor. Based on the foregoing, for purposes of a conservative analysis, the following is a description of the assumed activities and steps that PG&E would likely employ to accomplish the reconductoring and thus will be included in this project description for purposes of conducting the Project's CEQA analysis. For purposes of this analysis, we have assumed that an area 200 feet long by 100 feet wide around each support structure could be disturbed. The total estimated disturbance is therefore approximately 40 acres.

3.5.2.1 *Guard Structures*

Temporary wood poles will be used as guard structures at locations where they are required, typically at busy road crossings, trails, or other utility lines. Guard structures typically consist of a pair of temporary vertical wood poles that are directly buried with a horizontal cross-arm and netting. Guy wires may be installed to provide tension support for netting. Guard structures are installed as a safety precaution to prevent the conductor from falling to the ground if it is dropped or sagged excessively during reconductoring. The wood poles for guard structures are typically approximately 30 - 50 feet above ground and are buried approximately 5 - 7 feet below ground.

In lieu of installing temporary wood poles as guard structures, bucket or line trucks may be staged at crossings to hold the conductor, prevent it from falling, minimize ground disturbance, or to accommodate other construction-related needs.

The guard structure designed for the State Route 237 crossing will include netting to provide additional protection against falling or sagging conductor. The poles used for netted guard structures will be guyed for stability. It is anticipated that a combination of temporary lane closures and rolling breaks will be required to install the nets onto the guard structures.

To prevent the conductor from sagging onto other utility lines or roads, temporary guard structures will be installed as needed at crossings of electric lines, recreation trails, and roadways. Two, 2-pole or 3-pole guard structures with netting will be placed on each side of SR 237. When netting is used, temporary guy wires will be installed to support the additional load on the wood pole structures. Equipment needed to install the wood poles will likely operate from existing disturbed areas, such as road shoulders. It is estimated that installation of each guard structure pole will disturb approximately 100 square feet, accounting for the augured diameter plus stockpiled spoils. Guard structure poles will be installed in disturbed roadsides or developed areas where possible. K-rail will be placed along SR 237 shoulders to isolate the guard structures from vehicle traffic. Construction personnel will be stationed at trail crossings to temporarily hold or redirect recreationists to prevent contact with conductor during pulling operations.

3.5.2.2 *Snub Poles*

Snub poles are temporary wood poles used to facilitate pulling operations. Approximately two temporary snub poles may be required at each pull site where the conductor cannot be attached directly to the structure because of structure design. Snub poles typically extend approximately 30 - 50 feet aboveground and approximately 5 - 7 feet below ground. Snub poles will be removed upon completion of each wire pull.

3.5.2.3 *Line Replacement*

During reconductoring activities, the existing power lines will be taken out of service. To replace a conductor with a new conductor, the existing conductor will be detached from its support structure and temporarily lifted. Rollers then will be installed at the conductor's attachment point and the conductor will be placed onto the rollers. The rollers will allow the existing conductor to be pulled through each

structure until the new conductor is ready to be pulled up to the final tension position. Installing rollers and detaching the existing conductor may be accomplished using a helicopter, line trucks, bucket trucks, or other equipment.

A sock line will then be attached to the existing conductor, and a line truck with a drum puller and empty conductor reel will pull the old conductor onto the reel where it will be collected for salvage. The pulling through each structure will be done under controlled tension to keep the conductor elevated and away from obstacles. As a safety precaution, guard structures will be placed where the conductor crosses public roads, recreations trails, or other utility lines to prevent injury or damage if the conductor were to inadvertently fall.

Reel stands mounted on a line truck will feed the new conductor along the rollers at each structure while maintaining tension in the line to prevent contact with the ground or other obstacles. After the conductor is pulled into place, conductor sags will be adjusted to required tensions. This sequence will occur three times per circuit, once per conductor phase. The conductor will then be clamped to the end of each new insulator as the rollers are removed, and new vibration dampers and other accessories will be installed.

3.5.2.4 *Potential Tower and Pole Replacements on Land*

If structures located on land must be replaced, they will be installed with typical ground-based equipment, such as cranes, flatbed trucks, and line trucks, and possibly helicopters. Structures will typically be delivered to the work site in sections by tractor-trailer and assembled at ground level using a crane and cribbing.

Tower installation: If new towers must be installed, they will likely be installed using the drilled pier method. Each tower will require four foundations. Drilled pier foundations will have a diameter of approximately 6 feet and will range between approximately 20 and 30 feet deep. This technique will require an area of approximately 100 by 100 feet (0.3 acre) at each location. Matting will be used to provide both a stable work area and access to the work area, as needed. A drilled foundation is constructed by boring a hole into which concrete is poured and anchor bolts are set. Excavation for the foundation for each leg will take approximately 2 days per tower leg if conditions are dry (eight days total per tower), or three to four days per tower leg if groundwater is encountered (14 days total per tower). Drilling fluids will be disposed of using a mud recycler. Excess spoils will be hauled off site for disposal or used elsewhere on the project as fill, as appropriate. If dewatering is necessary during excavation, water will be discharged to the surface in compliance with applicable regulations or discharged to a portable tank or other container and disposed off-site in compliance with any applicable state and federal regulatory standards.

TSP installation: If new TSPs are required, the holes will measure approximately 6 feet wide and 30 feet deep. Excavated soils will be feathered in around the pole site and stabilized. A plastic sleeve may be placed in the hole to prevent cave-in; the plastic sleeve will not be removed prior to pole installation. Plywood and plastic coverings will be used to cover the excavated holes until pole installation activities begin.

The holes for TSPs will typically be drilled and excavated using a crawler-mounted augur. The excavator will set up adjacent to the existing pole and the new pole site. Line trucks mounted with augers will be used where poles are located in or adjacent to pull sites, staging areas, existing access roads, developed property, and where there is relatively level, open terrain.

Although drilled piers are the preferred method for tower foundation it is possible that site specific soil conditions may require installation of piles. In the event piles are required, pile types include wood, steel, and concrete piles. Concrete piles would be cast in place using a hollow steel pile as the casing or form. Installations would occur by helical pile driving, vibratory hammer pile driving, and impact hammer pile driving. Helical pile driving is a relatively new method of pile installation where large piles are screwed into the soil instead of being driven with a hammer. The type of pile installation utilized at each site will be determined by the site characteristics (e.g., soil or substrate type) and/or the availability of pile type.

The majority of the pile-driving activities required for tower repair/replacements and foundation repairs/replacements would occur within muddy, fine materials, and soft habitat that range from clay (very fine) to silt to sand (relatively course). A barge mounted vibratory or impact hammer, or a combination of the two, would be used to drive the piles. A helical pile driver or impact hammer may be utilized to install piles to their final depth. Piles would range from 16 to 72 inches in diameter. When an impact hammer is used, up to 2,000 strikes may occur per day.

When 24-inch diameter piles or smaller are used to repair foundations at a single tower, approximately 16 piles are installed and pile driving would last between 16 and 24 days. When 60-inch diameter piles are used to repair foundations at a single tower, four piles are installed and pile driving would typically take between 6 and 15 days. Installation of 72-inch piles would be similar to 60-inch diameter piles.

Pole sites that are not accessible by vehicles due to the absence of access roads and presence of steep terrain will typically be excavated by hand. Crews and equipment will be transported by helicopter to a nearby clearing or will access the pole site on foot from the nearest established access road. Equipment will include standard digging tools or portable equipment, as well as a compressor and jackhammer. It may be necessary for crews to establish a small pad to stabilize the compressor. Crews will use the jackhammer and other portable equipment to excavate a hole for the new pole.

New TSPs will be set in a concrete-pier foundation. A line truck will be used to place foundation forms, anchor bolts, and rebar. A cement truck will be used to deliver and pour concrete for the foundation form. Once the concrete has set, the form will be removed and gravel placed around the base. A crane will then be used to install the new TSP on the foundation. After the poles are set, any additional hardware will be added to the cross-arms using a utility terrain vehicle (UTV) with a worker-lift attachment.

Tower removal: Once the existing conductors for both circuits are transferred to the new structures, crews can begin disassembling and removing the existing lattice towers. To remove the top section, a helicopter or crane will be rigged to the top of the tower and sections will be unbolted or cuts will be

made at the desired removal point. The structure will be lifted and lowered to the ground where it will be cut into smaller sections and either transported to a laydown area or directly to a recycling facility. To remove the lower section, the legs will be cut off just above the foundations and a boom truck will remove the remaining sections. Existing foundations will be removed, including all concrete and steel, unless cutting them off below ground surface will reduce environmental impacts. The excavation resulting from footing removal will be filled in with soils excavated from the new foundation sites.

3.5.2.5 *Potential Tower Modifications*

Tower modifications may be necessary. If necessary, they may consist of installing Optical Ground Wire (OPGW) peaks to support the new OPGW, cage-top extensions to increase conductor clearance over open water or other structures, and/or structural body modifications to support the additional load from the new conductor. The OPGW peaks are typically 4-1/2 to 6-foot lattice extensions mounted to the top of the tower, and the cage-top extensions are typically 16-foot lattice extensions with cross arms bolted to the top of the tower. The tower body modifications will entail changing out and adding braces to the lower cage portion of the tower.

Installing OPGW peaks and cage-top extensions may be accomplished using a medium-duty helicopter to transport crews and materials to tower locations. The existing towers will be prepared to accommodate the extensions by installing any necessary braces or additional plates at connection points. The OPGW peaks and cage-top extensions will typically be pre-assembled at staging areas and transported to the individual towers by helicopter where crews will bolt the peaks and extensions onto the existing towers. Most of the body modifications will entail changing out and adding braces to the lower cage portion of the tower.

3.5.2.6 *Microwave Towers*

PG&E will likely install two microwave towers to help fulfill the reconductoring project's telecommunication and system protection requirements. One microwave telecommunication tower is proposed to be located at within new PG&E Switching Station to be located on the Project Site and one within the existing Zanker Road Substation at the City of San Jose/Santa Clara Regional Water Treatment Facility. The towers will be installed adjacent to the control enclosures at each location. The towers are expected to be approximately 80-90 feet in height and consist of three-leg, self-supporting lattice steel towers on top of 20-foot by 20-foot slab foundations. An approximately 4-foot diameter microwave transmitter will be installed near the top of each tower, connected by communication and power conduits. Field verification and line-of-sight path surveys may affect the tower dimensions but any changes would likely result in a smaller footprint.

3.5.2.7 *Foundation Improvements*

Foundation work at towers, if necessary, may consist of installing Tubex soil displacement piles adjacent to each existing tower footing. The installation starts with screwing in an approximately 16-inch diameter pile, 80- to 100-feet-deep, using a track mounted drill rig. Steel casing is advanced by the drill rig and grout is injected into the void created by the pile casing as the drill progresses. Once the pile is installed to depth, a steel rebar cage is lowered into the casing and the casing is filled with

concrete. Any groundwater that accumulates within the pile casing will be dewatered into a baker tank or equivalent for testing, then disposed of in accordance with the project Storm Water Pollution Prevention Plan (SWPPP) and applicable state and federal laws and regulations. With the Tubex pile system, there are no spoils generated during installation; the soil is displaced laterally and compacted as the drill bit is advanced. No backfill will be needed for this work, and any incidental drill spoils will be stockpiled on plastic for testing, then removed from the Reconductoring Work Areas for transport to an approved disposal facility.

Once the Tubex piles are in place, a horizontal concrete pile cap will structurally tie the new piles to the existing tower footings. The new concrete pile cap will be formed above the ground surface; minor excavation may be required to tie the new piles to the existing foundations.

To provide access and a stable work area around towers in marshlands, access routes and tower work areas will be established by placing timber mats or equivalent protective matting over the ground surface. Towers within marshlands will require approximately 0.3 acre of matted work area around the base of the towers. Limited grading may be needed to establish project work areas and access, but no grading will occur within marshlands.

If water is present when foundation work is planned, it may be necessary to construct a temporary cofferdam around the perimeter of the work area to isolate foundation work from open water. Cofferdams may consist of water-filled bladders (e.g., aqua dams), sandbags wrapped in plastic, or other similar means of controlling water from entering the work area. Once the cofferdam is in place, the work area will be dewatered in accordance with the project SWPPP.

3.5.2.8 *Pull Sites*

When conductors are strung between towers, pull sites are used to raise the conductors to the proper ground clearance height and to the proper line tension. Pull sites will have a footprint of approximately 0.2 - 0.6 acres within previously disturbed or developed areas. A temporary wood pole may be installed at each pull site to serve as a snub pole during reconductoring. Pull sites will be used to stage conductor pulling trucks and conductor reel trucks.

3.5.2.9 *Staging Areas*

Temporary staging areas will be the main base of operations during the reconductoring construction activities and will be used for a variety of purposes, including storage of construction materials and equipment as they arrive on site, as helicopter landing zones, for parking of vehicles and equipment, and as a meeting area for project management and work crews.

3.5.2.10 *Helicopter Use*

Access to several of the towers is difficult due to marshland and open-water habitat; use of a helicopter will facilitate delivery of materials and crews without the need to access every tower from the ground. Helicopters will be used to remove and install the conductors, to set the cage-top extensions and OPGW peaks, and transport laborers and materials to the towers. Two light-duty helicopters (Hughes 500 or

similar) may be used to transport crew members and materials, and to remove and install conductors. A medium- or heavy-duty helicopter (Bell Ranger UE205 or similar) may be used to install the OPGW peaks and to install the cage-top extensions. Helicopters will fly directly from the landing zone to the alignment, and will follow the alignment to each tower site unless restricted by neighboring structures or flight paths. At the end of each day, helicopters will return to a local commercial airport or another appropriately equipped facility. Helicopters will not transport loads over roads or habitable structures. Temporary landing zones with designated areas for helicopter take-offs and landings will be established within the staging areas. Dust suppressants or water will be applied, as needed, to control dust at the landing zone. Helicopters are anticipated to primarily refuel at nearby commercial airports; however, a fuel truck may be available at staging areas to support refueling if needed. Spill prevention measures will be in place for any onsite helicopter refueling in compliance with the subject SWPPP.

Construction workers using helicopters are required to be certified for helicopter safety, and must produce a certification card to the pilot before they can fly. Personnel and pilots will attend a daily tailboard meeting at the landing zone that covers safety topics for the day, including the route to be taken and work locations to be visited. Helicopter flight plans will be filed with the local FAA office regulating the local air traffic control plan if required.

3.5.2.11 *Access Roads*

Project work areas will be accessed using a combination of public roads, existing paved and gravel roads, and new matted temporary access routes across marshlands. No new access roads are anticipated to be necessary to complete the Reconductoring Activities, no or minimal grading is anticipated, and no permanent access roads are proposed. Equipment will access tower work areas within marshlands by placing wooden timber mats onto the existing surface to create an approximately 10-foot-wide access route. A combination of matting and steel plates will be utilized to provide equipment access at grade changes (such as when accessing mudflats or marshlands from upland areas).

3.5.2.12 *Erosion and Sediment Control and Pollution Prevention during Construction*

Construction of the Reconductoring Activities will require ground-disturbing activities associated with tower foundation work and establishment of work areas. Because these activities will result in disturbance of more than one acre, PG&E will be required to obtain coverage under the State Water Resource Control Board (SWRCB) General Permit for Storm Water Discharges Associated with Construction Activity Order No. 2009-0009-DWQ. To obtain coverage under the permit, PG&E will develop and submit permit registration documents—including a Notice of Intent, SWPPP, risk assessment, site map, certification, and annual fee—to the SWRCB prior to initiating construction activities.

PG&E will be required to implement the SWPPP during construction to prevent the discharge of sediment and other pollutants resulting from project construction. The SWPPP will outline implementation of BMPs for each activity that has the potential to degrade surrounding water quality through erosion, sediment runoff, and discharge of other pollutants.

3.5.2.13 *Cleanup and Post-Construction Restoration*

Crews will be required to maintain clean work areas and will be instructed that no debris may be left behind at any stage of the Reconductoring Activities. Packing crates, spare bolts, and construction debris will be picked up and hauled away for recycling or disposal during construction. Conductors removed from the Reconductoring Work Areas will be taken to appropriate disposal facilities to be reused, recycled, or disposed of in accordance with applicable laws and regulations. PG&E will conduct a final survey to ensure that cleanup activities have been successfully completed.

Work areas will generally be established by either matting over existing vegetation, or mowing, but certain portions of the Reconductoring Activities will be located within critical habitat, which would likely require restoration of Reconductoring Work Areas. PG&E will follow its existing permits conditions as described in Section 3.5.2.16 should restoration be required.

3.5.2.14 *Construction Workforce and Equipment for Reconductoring Activities*

Project construction will include but may not be limited to a foundation crew, helicopter crew, tower crew, line crew, environmental inspector, and biological monitor. Approximately 15 construction workers will be within the a portion of the Reconductoring Work Areas on a typical work day; however, because work associated with Reconductoring Activities in one area may occur concurrently along with work in other Reconductoring Work Areas, up to approximately 25 workers may be somewhere on the Reconductoring Work Areas at any time. Multiple crews may be deployed to meet a tight construction schedule.

Reconductoring Activities will typically take place between 7 a.m. and 7 p.m., six days per week. Because construction will progress quickly, construction activities are not expected to take place near any one structure location for more than a few days, with the exception of foundation modifications that could take somewhat longer. Nighttime construction is not anticipated except for certain construction procedures that cannot be interrupted because of safety considerations, such as reconductoring over highway crossings, or to take advantage of line clearances during off-peak hours.

Anticipated Reconductoring Construction Equipment

Type of Equipment	**Use**
Bucket truck	Lift and transport workers
Skid steer	Remove excavation spoils
Concrete truck	Mix and deliver concrete
Pickup truck	Transport personnel, tools, and materials
Compressor	Operate tools
Crawler dozer	Pulling lines and sagging conductors
Drill rig	Excavate foundation holes
Rough terrain forklift	Lift and transport heavy construction items; set crane mats
Generator	Provide temporary power

Type of Equipment	Use
Light-duty helicopter	Use for pulling operations; also transport crew and materials
Medium-duty helicopter	Set cage-top extensions and OPGW peaks
Man lift	Lift crews to structures
Mobile offices	Use as supervision and clerical office
Line truck w/ puller	Pull line in stringing operation
Line truck w/ wire reel	Transport reels of conductor
Line truck w/ tensioner	Hold tension against a pulling line during the stringing phase
Tractor trailer (semi-truck)	Haul materials, equipment, tools, etc.
Boom truck	Lift materials
Water truck	Provide dust control

3.5.2.15 *Transmission Line Operation and Maintenance*

No material changes in maintenance and operation activities for the Newark-Trimble 115 kV Power Line will be required after reconductoring. The line will continue to be inspected annually or as needed when driven by an event, such as an emergency. The current PG&E facility inspection process involves three types of inspections: (1) ground inspections; (2) aerial inspections; and (3) climbing, if ground inspections indicate such need. Maintenance of the line is now and will continue to be generally conducted on an as-needed basis, when something is discovered in need of repair during inspections, or in response to an emergency.

3.5.2.16 *Required Permitting for Reconductoring Activities*

PG&E's interconnection facilities and the Reconductoring Activities will be constructed by PG&E to provide electrical power to the data center uses. PG&E's contemplated activities described herein are analyzed in this CEQA document because, combined with the data center uses and related on- and off-site improvements described herein, the foregoing collectively constitute the whole of the Project being evaluated under CEQA. However, the PG&E interconnection facilities and the Reconductoring Activities are not part of the CEC SPPE application and will not be authorized under a CEC decision. Based on the preliminary scope of the PG&E interconnection facilities and the Reconductoring Activities, PG&E's construction would require noticing under Section III.B of General Order 131-D (GO 131-D). PG&E would be required to separately comply with GO 131-D before pursuing any Reconductoring Activities.

3.5.2.17 *PG&E Construction Measures (PG&E Interconnection and Reconductoring)*

Work performed by PG&E on interconnection facilities and the Reconductoring Activities will be subject to all applicable regulatory requirements, such as, among others, those governing hazardous materials management and water quality protection. None of the Applicant Proposed Design Features included in Section 3.6 would be applicable to work performed by PG&E. Appendix K includes impact avoidance and minimization measures (AMMs) that will be implemented by PG&E as part of the

Reconductoring Project. Appendix K includes the AMMs that are included in the existing PG&E permits and authorizations that are applicable to the Reconductoring Activities. The foregoing shall be referred to herein collectively as “PG&E Construction Measures".

3.6 PROJECT DESIGN FEATURES

The Project will incorporate specified features into the design of the Project, referenced herein as "Project Design Features" (or PDFs), which will ensure all Project impacts are less than significant. The PDFs are included here in summary form as part of the project description. During the CEC's CEQA review, it is anticipated that these PDFs will be incorporated as either enforceable mitigation measures via the Project's MMRP or as conditions of approval. Consistent with this understanding, some of the PDFs described below are identified as mitigation measures in the supporting technical reports that are included with this SPPE Application. These PDFs are not intended to and should not be applied to any of the work performed by PG&E as part of its Reconductoring Activities described in Section 3.5 above and will only apply to Microsoft's work within the Project Site boundary and those Offsite Infrastructure Areas described in Section 3.3.9.

Air Quality:

PDF AIR-1: To ensure that fugitive dust impacts are less than significant, the Project shall implement the BAAQMD's recommended BMPs during the construction phase. These BMPs shall be incorporated into the design of the Project and shall consist of:

- All exposed surfaces (soil piles, graded areas, and unpaved access roads) shall be watered at least two times per day or stabilized using other BMPs for erosion control.
- All haul trucks transporting material offsite shall be covered.
- All track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
- All vehicle speeds on onsite unpaved surfaces shall be limited to less than or equal to 15 miles per hour. In addition, no unpaved offsite roadways will be used to service the Project during construction (or operation).
- All roadways, driveways, and sidewalks shall be paved as soon as possible. Building pads shall be completed as soon as possible after grading unless seeding or soil binders are used.
- Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Information on who to contact, contact phone number, and how to initiate complaints about fugitive dust problems will be posted at the site.

Biological Resources:

PDF BIO-1.1: Nesting Season Avoidance. To the extent feasible, commencement of construction activities should be scheduled to avoid the nesting season. 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.

PDF BIO-1.2: Preconstruction/Pre-disturbance Surveys and Buffers. 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 seven days prior to the initiation of demolition or construction activities, including 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 immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a construction free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code shall be disturbed during project implementation.

PDF BIO-2.1: Due to the potential for bird collisions with the SJ04 and SJ06 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 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.
- No more than 10 percent of the surface area of the combined façades for the SJ04 and SJ06 buildings 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. Vertical elements of the window patterns should be at least 0.25 inch wide at a maximum spacing of four inches or have horizontal elements at least 0.125 inch wide at a maximum spacing of two inches.

- 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-compliant lighting[5], and others.

PDF BIO-3.1: A tree removal permit would be required from the City of San José for the removal of potential ordinance-sized trees. The removed trees would be replaced according to tree replacement ratios required by the City, as provided in **Error! Reference source not found.** below.

Table 3.6-1: Tree Replacement Ratios

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

x:x = tree replacement to tree loss ratio
Note: Trees greater than or equal to 38-inch circumference 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 tree = two 15-gallon trees
Single Family and Two-dwelling properties may be mitigated at a 1:1 ratio.

A total of 18 trees onsite would be removed. Three trees would be replaced at a 1:1 ratio, one tree would be replaced at a ratio of 2:1, four trees would be replaced at a 3:1 ratio, one tree would be replaced at a ratio of 4:1, and 10 trees would be replaced at a 5:1 ratio. The total number of replacement trees required to be planted on-site is 71 trees, all of which would be planted from 15-gallon containers.

In the event the Project Site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage:

[5] 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 2020).

- 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, at the development permit stage.
- The Project may pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of Public Works grading permit(s), in accordance with the City Council approved Fee Resolution. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

PDF BIO-4.1: The Project will pay applicable Santa Clara Valley Habitat Plan fees (including the nitrogen deposition fee) prior to issuance of any grading permits, as applicable. The Project applicant shall submit the Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee for approval and payment of all applicable fees prior to the issuance of a grading permit.

PDF BIO-5.1: Payment of Burrowing Owl Fees for Permanent Impacts on California Annual Grassland. The project will pay Santa Clara Valley Habitat Plan burrowing owl fees for the permanent loss of 18.6 acres of California annual grassland that provides ostensibly suitable, but currently unoccupied, burrowing owl foraging habitat. These fees shall be paid to the Santa Clara Valley Habitat Agency prior to issuance of a grading permit.

Cultural Resources:

PDF CUL-1.1: Treatment Plan: A Cultural Resources Treatment Plan shall be prepared by a qualified archaeologist, in consultation with a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area. The Cultural Resources Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Cultural Resources Treatment Plan shall be prepared and submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement prior to approval of a grading permit. The Treatment Plan shall contain, at a minimum:

- Identification of the scope of work and range of subsurface activities (including location map and development plan), including requirements for preliminary field investigations.
- Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found).

- Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- Detailed field strategy used to record, recover, or avoid finds and address research goals.
- Analytical methods.
- Report structure and outline of document contents.
- Disposition of artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

PDF CUL-1.2: Investigation: The Project applicant shall complete a preliminary field investigation program on the Project Site in conformance with the Cultural Resources Treatment Plan required under Project Design Feature PDF CUL-1.1. The locations of subsurface testing and exploratory trenching shall be determined prior to issuance of any grading permit based on the Cultural Resources Treatment Plan recommendations. A qualified archaeologist and a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, shall complete a presence/absence exploration.

If any finds are discovered during the preliminary field investigation, the Project shall implement PDF CUL-1.4 for evaluation and recovery methodologies. The results of the preliminary field investigation shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement for review and approval prior to issuance of any grading permit.

PDF CUL-1.3: Construction Monitoring and Protection Measures: Although the data recovery and treatment program performed in accordance with CUL 1.2 would be expected to recover potentially significant materials and information from the areas impacted prior to grading, it is possible that additional resources could remain. Therefore, ground-disturbing activities in native soil (e.g., grading and excavation) shall be completed under the observation of a qualified archaeologist and a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area.

The qualified archaeologist or a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, shall have authority to halt construction activities

temporarily in the immediate vicinity of an unanticipated find. If, for any reasons, the qualified archaeologist or a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, is not present, but construction crews encounter a cultural resource, all work shall stop temporarily within 50 feet of the find until a qualified archaeologist in consultation with a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, has been contacted to determine the proper course of action. The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement shall be notified of any finds during the grading or other construction activities. Any human remains encountered during construction shall be treated according to the protocol identified in PDF CUL-2.5.

PDF CUL-1.4: Evaluation and Data Recovery: The Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement shall be notified of any finds during the preliminary field investigation, grading, or other construction activities. construction activities shall be evaluated for eligibility for listing as a Candidate City Landmark and/or in the California Register of Historic Resources. Data recovery methods may include, but are not limited to, backhoe trenching, shovel test units, hand auguring, and hand-excavation.

The techniques used for data recovery shall follow the protocols identified in the Cultural Resources Treatment Plan required in PDF CUL-1.1. Data recovery shall include excavation and exposure of features, field documentation, and recordation.

PDF CUL-1.5: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of San José procedures.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant or qualified archaeologist in consultation with a Native American representative registered with the Native American Heritage Commission from the City of San José and that is traditionally and culturally affiliated with the geographic

area shall immediately notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement, who will then notify the Santa Clara County Coroner. The Coroner shall make a determination as to whether the remains are Native American.

If the remains are believed to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall then designate a Most Likely Descendant (MLD). The MLD shall inspect the remains and make a recommendation on the treatment of the remains and associated artifacts.

If one of the following conditions occurs, the Project applicant or his authorized representative shall work with the Coroner, in consultation with a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

PDF CUL-1.6: Site Security: At the discretion of the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement, site fencing shall be installed on-site during the investigation, grading, building, or other construction activities on the Project Site to avoid destruction and/or theft of potential cultural resources. The responsible qualified archaeologist, in consultation with a qualified Native American monitor, registered with the Native American Heritage Commission (NAHC) for the City of San José and that is traditionally and culturally affiliated with the geographic area, shall advise the Supervising Environmental Planner and Historic Preservation Officer of the City of San José Department of Planning, Building, and Code Enforcement as to the necessity for a guard. The purpose of the security guard shall be to ensure the safety of any potential cultural resources (including human remains) that are left exposed overnight on the Project Site. The Director of PBCE shall have the final discretion to authorize the use of a security guard at the project site.

PDF CUL-1.7: Final Reporting: Once all analyses and studies required been completed, the project applicant, or representative, shall prepare a final report summarizing the results of the field investigation, data recovery activities and results, and compliance with the Cultural Resources Treatment Plan. The report shall document the results of field and laboratory investigations and shall meet the Secretary of the Interior's Standards for Archaeological Documentation. The contents of the report shall be consistent with the protocol included in the Cultural Resources Treatment Plan. The report shall be submitted to the Director of Planning, Building, and Code Enforcement for review and approval prior to issuance of any Certificates of Occupancy (temporary or final). Once approved, the final documentation shall be submitted to the Northwest Information Center at Sonoma State University, as appropriate.

PDF CUL-1.8: Curation: Upon completion of the final report required by the Cultural Resources Treatment Plan, all recovered archaeological materials not identified as tribal cultural resources by the Native American monitor, shall be transferred to a long-term curation facility. Any curation facility used shall meet the standards outlined in the National Park Services' Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79). The Project applicant shall notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement of the selected curation facility prior to the issuance of any Certificates of Occupancy (temporary or final). To the extent feasible, and in consultation with the Native American representative, all recovered Native American/tribal cultural resources and artifacts shall be reburied on-site in an area that is unlikely to be disturbed again. Treatment of materials to be curated shall be consistent with the protocols included in the c Cultural Resources Treatment Plan.

All archaeological materials recovered during the data recovery efforts shall be cleaned, sorted, catalogued, and analyzed following standard archaeological procedures, and shall be documented in a report submitted to the Director of Planning, Building and Code Enforcement and the NWIC.

PDF CUL-1.9: Dignified and Respectful Treatment – Cultural Sensitivity Training Prior to Construction: An important aspect of the consultation process is a dignified and respectful treatment of Tribal Cultural Resources. Prior to issuance of the grading permit, the Project shall be required to submit evidence that an Archaeological Monitoring Contractor Awareness Training was held prior to ground disturbance. The training shall be facilitated by the Project archaeologist in coordination with a Native American representative registered with the Native American Heritage Commissions for the City of

San José and that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3.

Geology and Soils:

PDF GEO-1: The Project shall implement the following City of San José Standard Permit Conditions related to geological hazards:

- 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 Project 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 (if any) on the Project Site (as well as the Off-Site Infrastructure Areas) 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 applicable provisions of 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.

PDF GEO-2: The Project shall implement the following City of San José Standard Permit Condition related to paleontological resources:

- If vertebrate fossils are discovered during construction, all work on the Project Site or within the Off-Site Infrastructure Areas , as relevant) within 50 feet of any potential fossil find shall stop immediately, Director of Planning or Director's designee of the Department of Planning, Building and Code Enforcement (PBCE) shall be notified, and a qualified professional paleontologist shall assess the nature and importance of the find and recommend appropriate treatment, to the extent the find is considered significant. Treatment may include, but is not limited to,

preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The Project applicant shall be responsible for implementing the recommendations of the qualified paleontologist. A report of all findings shall be submitted to the Director of Planning or Director's designee of the PBCE.

Greenhouse Gas Emissions:

PDF GHG-1.1: The Project owner shall participate in the San José Clean Energy (SJCE) at the Total Green level (i.e., 100% carbon-free electricity) for electricity accounts associated with the Project, or enter into an electricity contract with SJCE or participate in a clean energy program that accomplishes the same goals of 100% carbon-free electricity as the SJCE Total Green Level.

PDF GHG-1.2: The Project applicant 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 will document their efforts to secure other vendors of renewable diesel fuel prior to refueling with non-renewable diesel. The Project applicant shall provide such documentation to the Director or Director's designee with the City of San Jose Planning, Building and Code Enforcement (PBCE).

Hazards and Hazardous Materials:

PDF HAZ-1.1: A Site Management Plan (SMP) shall be prepared for the Project Site if required and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the Santa Clara County Hazardous Materials Compliance Division (HMCD) or the California Department of Toxic Substances Control (DTSC). The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

If there are no contaminants identified in areas of the Project Site to be disturbed that exceed applicable screening levels for the protection of future residential and commercial workers, published by the Regional Water Quality Control Board, Department of Toxic Substances Control, and/or Environmental Protection Agency, the Project applicant shall not be required to prepare or submit a Site Management Plan.

In addition, all contractors and subcontractors shall develop a Health and Safety Plan (HSP) specific to their scope of work and based upon the known

environmental conditions. The HSP shall be approved by the Director or Director's designee with the City of San Jose Department of Planning, Building and Code Enforcement (PBCE) and the City of San Jose Environmental Services Department (ESD) and implemented under the direction of a Site Safety and Health Officer.

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

- A detailed discussion of the site background;
- Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
- Onsite soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
- Sampling and laboratory analyses 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.

Components of the HSP shall include, but shall not be limited to, the following elements, as applicable:

- Provisions for personal protection and monitoring exposure to construction workers;
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;
- Procedures for the safe storage, stockpiling, and disposal of contaminated soils;
- Provisions for the onsite management and/or treatment of contaminated groundwater during extraction or dewatering activities; and
- Emergency procedures and responsible personnel.

The SMP and HSP shall be submitted to HMCD, DTSC, or equivalent regulatory agency for review and/or approval (if required). Copies of the approved SMP and HSP shall be provided to the PBCE Supervising

Environmental Planner and Environmental Services Department (ESD) prior to issuance of grading permits (if required).

PDF HAZ-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, which may involve installation of a treatment system(s) at the dewatering location. 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 California Regional Water Quality Control Board 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 Regional Water Quality Control Board (RWQCB) pollutant discharge limits. The water shall be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Water that exceeds discharge limits (if any) shall be treated to reduce pollutant concentrations to acceptable levels prior to discharge. Based on the results of the analytical testing, the Project applicant shall work with the RWQCB and the local wastewater treatment plant to determine appropriate disposal options and then implement same. A copy of the discharge permit or NPDES permit, whichever is applicable, shall be submitted to the Director of Planning or Director's designee prior to the start of construction.

Hydrology and Water Quality:

PDF HYD-1.1: 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.

Noise:

PDF NOI-1: The Project shall implement the following City of San José Standard Permit Conditions related to construction noise:

- Limit construction hours to between 7:00 AM and 7:00 PM, Monday through Friday, unless permission is granted with a development permit or other planning approval. No construction activities are permitted on the weekends at sites within 500 feet of a residence. Construction outside of these hours may be approved through a development permit based on a site-specific "construction noise mitigation plan" and a finding by the Director of PBCE that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.
- Construct solid plywood fences 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 scree stationary noise-generating equipment when located near adjoining sensitive land uses (if any).
- Utilize "quiet" are 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 Off-Site Infrastructure Areas.
- 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:

PDF TRN-1: The Project shall implement the following VMT reduction measure.

- The Project shall limit the on-site parking supply (a Tier 3 VMT reduction measure) to mitigate the VMT impact. The Project shall provide a total of 148 vehicle parking spaces, which is 25 fewer spaces than what the City of San José Municipal Code requires. The Project shall request and obtain a parking exception from the City of San José Department of Planning, Building & Code Enforcement in order to qualify for the parking reduction.