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RESPONSE TO CEC STAFF DATA REQUEST SET 2

San Jose Data Center 04 (22-SPPE-02)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: **Microsoft**

June 2023

DAYZEN LLC

INTRODUCTION

Attached are Microsoft's responses to California Energy Commission (CEC) Staff Data Request Set No. 2 (50-69) for the SJ04 Data Center Application for Small Power Plant Exemption (SPPE) (22-SPPE-02). Staff issued Data Request Set No. 2 on April 13, 2023.

The Data Responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Staff presented them and are keyed to the Data Request numbers (50-69). Additional tables, figures, or documents submitted in response to a data request (e.g., supporting data, stand-alone documents such as plans, folding graphics, etc.) are found in Attachments at the end of the document and labeled with the Data Request Number for ease of reference.

For context, the text of the Background and Data Request precede each Data Response.

GENERAL OBJECTIONS

Microsoft objects to all data requests that require analysis beyond which is necessary to comply with the California Environmental Quality Act (CEQA) or which require Microsoft to provide data that is in the control of third parties and not reasonably available to Microsoft. Notwithstanding this objection, Microsoft has worked diligently to provide these responses swiftly to allow the CEC Staff to prepare the Draft Environmental Impact Report (DEIR).

AIR QUALITY

BACKGROUND: Documentation for C27 Engines

As part of the response to CEC Data Request Set 1 number 6 (TN 249012), the applicant provided Caterpillar documentation showing the warmup times at different load points for the C175 engines. Staff needs a similar documentation showing the warmup times at different load points for the C27 engines.

In addition, the applicant's screening modeling analysis for Data Request Set 1 number 7 included different exhaust parameters and emission factors at different load points for both the C175 engines and the C27 engines. Appendix AQ-2 of the Small Power Plant Exemption (SPPE) application included performance data for the C175 engines. Staff needs similar performance data for the C27 engines to verify the exhaust parameters and emission factors at different load points.

DATA REQUESTS

50. Please provide documentation showing warmup times at different load points for the C27 engines.

RESPONSE TO DATA REQUEST 50

The Caterpillar data supplied with Data Response 6 (previously submitted) lists the SCR warmup times to be less than 15 minutes with the exception of the 10 percent load case, which has a warmup time of 21 minutes. This data can be applied to the smaller C27 engines. As noted below, the worst-case screening modeling demonstrates that the 100 percent load case is always the worst case with regards to both emissions and modeled impacts. The assumed 15-minute SCR warmup used in the modeling is much more conservative than the 7-minute warmup time provided by Caterpillar.

51. Please provide performance data showing emission factors and exhaust parameters at different load points for the C27 engines.

RESPONSE TO DATA REQUEST 51

Please see the table below.

Performance Data		CAT C27					
Load Case %	BHP	Fuel, L/hr	Stack, m3/min	Stack, K	Stack Ht, m	Stack Diam, m	Stack Vel, m/sec
100	1214	213.8	170.3	784.70	41.1	0.457	17.3
75	932	169.6	142.8	763.00	41.1	0.457	14.51
50	654	120.7	104.7	727.40	41.1	0.457	10.64
25	380	73.1	67.7	643.50	41.1	0.457	6.88
10	210	45	48.6	558.00	41.1	0.457	4.94
	Uncontrolled Emissions						
Load Case %	NOx, lbs/hr						NOx, g/s
100	13.740						1.73124
75	8.210						1.03446
50	6.220						0.78372
25	3.620						0.45612
10	2.280						0.28728

BACKGROUND: Cooling Tower Emissions Rates

As part of the response to CEC Data Request Set 1 number 10, the applicant provided corrected modeling files, which include particulate matter emission rates for the cooling tower from Tables AQ1-3 and AQ1-4 of the SPPE application. However, the applicant's response to CEC Data Request Set 1 number 19 includes a revised Table AQ1-3 with lower cooling tower emission rates based on the updated water use information. Staff needs to confirm whether the applicant would revise the modeling files to match the lower cooling tower emission rates provided in the revised Table AQ1-3. If not, staff would use the more conservative modeling results with the use of the cooling tower emission rates from Tables AQ1-3 and AQ1-4 of the SPPE application.

DATA REQUEST

52. Please confirm whether the modeling files would be revised to match the lower cooling tower emission rates provided in the revised Table AQ1-3 in TN 249012.

RESPONSE TO DATA REQUEST 52

The modeling was revised and will be provided to the CEC. The modeling results are consistent with the previous assessment in that the concentrations are all less than significant.

BACKGROUND: Refrigerant Leak Estimate

Section 3.3.4.2 describes the cooling system that will be used for the data center. The section states that R-410A refrigerant will be utilized in battery room AC units and in the dedicated outside air units used to provide air for each data center room. Staff requests a quantification of the refrigerant leakage rate associated with the cooling system.

DATA REQUEST

53. Please provide an estimate of the annual refrigerant leakage for the cooling system, reported as carbon dioxide equivalent (CO_2-e).

RESPONSE TO DATA REQUEST 53

The equipment using refrigeration on site includes the following. We have provided estimates based on the anticipated equipment that will be used.

- Administration Area DOAS Unit
    - Circuit 1: 30 lbs (480 oz)
    - Circuit 2: 22 lbs (352 oz)
- Administration Variable Refrigeration (VRF) Units:
    - Unit 1A: 46.5 lbs
    - Unit 1B: 46.5 lbs
    - Unit 2A: 44.08 lbs
    - Unit 2B: 44.08 lbs
    - Unit 2C: 49.6 lbs
    - Unit 4: 40.24 lbs
- Data Center DOAS Units
    - 16 Total Units (4 per level of the building): 448 lbs total (28 lbs per unit)
- Data Center Battery Room Cooling Units
    - 32 Total Units (8 per level of the building): 177 lbs total (5.4 lbs per unit)
- Roof Pump Enclosures
    - 16 Total Enclosures: 86.4 lbs total (5.4 lbs per unit)
- Total Anticipated 410A Refrigerant: 1034 lbs

- Anticipated Leakage (based on a 1% leakage rate): 10.3 lbs
    - Resulting Total CO2e: 21,500 lbs per year.
- NOTE: 1 lbs of 410A refrigerant = 2,088 lbs CO2e based on US EPA, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

BIOLOGICAL RESOURCES

BACKGROUND: Crotch Bumble Bee

Application materials state that the Crotch bumble bee (among other species) is absent from the project site due to "less urbanized settings in the South Bay, or in specialized habitats in the South Bay, are absent from the project site due to a lack of suitable habitat and/or isolation of the site from populations by urbanization" (TN 245947, page 27). This species is a candidate for listing under California Fish and Game Code (CDFG) and therefore is eligible for CEQA consideration (Appendix G). Further, this species is known from the California Natural Diversity Database (CNDDB 2023) to occur in the project vicinity: in the San Jose West topographic quadrangle (an old occurrence from 1903 as well as a more recent occurrence in iNaturalist (iNaturalist 2023) from 2021).

A succinct, comprehensive species account for the Crotch bumble bee states "Bumble bees are social insects that live in colonies composed of a queen, workers, and reproductives (males and new queens). Colonies are annual and only the new, mated queens overwinter. These queens emerge from hibernation in the early spring and immediately start foraging for pollen and nectar and begin to search for a nest site.

Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Initially, the queen does all of the foraging and care for the colony until the first workers emerge and assist with these duties. Bumble bees collect both nectar and pollen of the plants that they pollinate." (IUCN Redlist 2023).

While nectar (food) sources may not be available on site for Crotch bumble bee, they have been documented foraging up to 10 km (6 miles) away (NatureServe Explorer 2023). Further, while the site is occasionally mowed, tufts of grass, old bird nests, rock piles, and dead tree cavities may exist on or immediately offsite adjacent the Guadalupe River corridor, as well as to vacant properties to the immediate northeast (across Orchard Parkway) and southeast (across Component Drive). Food plants include milkweeds, chaenactis, lupines, medics, phacelias, and sages (Hatfield et al 2015); with milkweed a favorite nectar source of Crotch bumble bee. These food sources may exist offsite within 10 km foraging distance of the species, and with potential nesting habitat onsite, staff requests the following information to assess direct and indirect impacts to this species. While a formal protocol for this species is not currently published, California Department of Fish and Wildlife (CDFW) has committed to reviewing and providing feedback on

project-specific protocols for this species on another project (Willow Rock 21-AFC-02) when submitted by the applicant (TN 248949).

DATA REQUESTS

54. Please explain why this species was dismissed from further consideration.

RESPONSE TO DATA REQUEST 54

Microsoft has retained HT Harvey to conduct surveys for the Crotch Bumblebee; the results of which will be supplied as a Supplemental Response to Data Requests 54 and 55.

55. Please review and evaluate if a habitat assessment should be prepared and provide the rationale for staff's review. Please contact CDFW to determine whether surveys for Crotch bumble bee are required, and for expert guidance in this effort.

RESPONSE TO DATA REQUEST 55

Please See Response to Data Request 54.

56. Please provide the property's actual mowing regime and history when it started, if available; if known, please provide maintenance schedule (if any) for adjacent vacant properties.

RESPONSE TO DATA REQUEST 56

The property has not been mowed for over a year although a maintenance schedule is currently being developed.

CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

BACKGROUND: Cultural Resources Report Content

Staff has reviewed the results of the applicant's August 2, 2022, cultural resources literature review (CLR) by PaleoWest (PaleoWest 2022a). The CLR does not include many standard cultural resource management report components required to evaluate the impacts of the proposed project on cultural resources (see OHP 1990). Therefore, additional information is required to complete staff's analysis of the proposed project.

DATA REQUEST

57. Please use the existing CLR to prepare a cultural resources assessment report for the project that meets the information requirements established by the Office of Historic Preservation (OHP 1990), which include regulatory setting, environmental setting, and cultural setting (prehistoric and historic contexts) including a discussion of what kinds of cultural resources could be present within the project area. An example of a report that meets these standards is the PaleoWest October 13, 2022, cultural resources assessment for the STACK Trade Zone Park (21-SPPE-02) project (PaleoWest 2022b). Considerable cultural information is presented in the application (DayZenLLC 2022a) that does not appear in the CLR, and it is suggested that this data be included in the revised CLR. This may include, but should not be limited to, a discussion of possible buried resources such as Trimble Road, possible mission associated structures, historic period villages, etc. In addition, the CLR references a property owned by M. Dawson depicted on an 1876 Thompson & West map (PaleoWest 2022a), but it does not mention that a building is depicted on this map that might be within the project site or discuss possible buried cultural resources in relation to this building. The CEC staff have also conducted research that indicates Mission-related activities, including built features, may have taken place on the east side of the Guadalupe River in the vicinity of the project site prior to the final establishment of the river as the dividing line between the Mission and the Pueblo de San Jose (Hall 1871: 64). This data should support the recommendations of the revised CLR. Please also use the current project name (San José Data Center (SJDC 04)) throughout the revised cultural resources assessment report.

    Note: Other SJDC 04 project documents may also need to be updated to incorporate the results of this data request and others that follow. This includes but is not limited to TN 245946 Sections 4.5 and 4.18 (DayZenLLC 2022a).

RESPONSE TO DATA REQUEST 57

After receiving this set of data requests, Microsoft representatives, Chronical Heritage (formerly PaleoWest) and Cultural Staff met to discuss the data responses in light of a project change required by notification that PG&E will need to reconductor approximately 12 miles of its existing system to serve the project. It was agreed that Chronical Heritage would conduct additional literature research, archaeological and historical resource surveys for the reconductoring revised project description and will revise the Cultural Resources Assessment Report to include the reconductoring and project and consistent with Data Requests 57 through 65. Therefore, Staff will only be required to review the revised Cultural Resources Assessment Report instead of multiple iterations. The Revised Cultural Resources Assessment Report will be docketed under a request for confidentiality when completed.

BACKGROUND: Defining Project Boundaries

The CLR uses the terms study area and project area throughout (see Figures 2 and 3 in the CLR depicting project area). The term study area is defined in the CLR as a 0.50- mile buffer surrounding the project area and is depicted on five Resource Maps. Unfortunately, the project area as defined in the CLR does not depict the full extent of the area required to evaluate the effects of the proposed SJDC 04 project on built environment resources. More specifically, a minimal one-building/parcel-band around the area where construction shall take place is required to evaluate the potential effects/impacts of any proposed project on built environment resources. Figures 2 and 3 as presented in the CLR do not include a one-building/parcel-band surrounding the area where construction shall take place.

DATA REQUEST

58. Please revise all existing figures and text in the existing CLR to include the following descriptors in a revised cultural resources assessment report for the project. The term project site shall be defined as including that property or area of land on which any form of construction activity for the proposed project will take place. The term project area shall be defined as including that geographic area formed by a one-building/parcel-band surrounding the project site. The use of the term study area may remain the same.

    In responding to this data request, PaleoWest staff may need to employ more than a one parcel or property band surrounding the newly defined project site as the surrounding properties are not fully built-out on largely flat land, and the project description implies that the proposed buildings would be four stories in height. This may extend the visual impact area of the proposed project farther out than a one-building or one-parcel band. For example, it is suggested that the visual impact area or project area may extend to the south and southwest to include the United States

101 freeway as the southern boundary of the freeway is visible at several locations from the north side path adjacent to the Guadalupe River.

RESPONSE TO DATA REQUEST 58

See Response to Data Request 57.

BACKGROUND: Discussion of Parking and Staging Areas

The draft CLR does not include a discussion of two potential construction locations that are not on the newly defined 22-acre project site. First, the application notes that off- site "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" (DayZenLLC 2022a, page 19). Second, the draft CLR does not include a discussion of proposed traffic improvements at the intersection of Trimble Road and Orchard Parkway. The application notes that improvements "to the intersection corners will consist of removal of the existing pedestrian refuge (pork-chop) islands at the southwest and southeast corners" (DayZenLLC 2022a, page 18).

DATA REQUEST

59. Please discuss the proposed project staging/parking area in the revised cultural resources assessment report as follows.

    a. Please provide a map in the revised report showing the location of the proposed staging and parking area and briefly describe the proposed location setting in text (i.e., commercial, industrial properties, railroad alignment to east, etc.).

    b. Please incorporate all City of Santa Clara cultural resource guidelines and evaluation procedures, as appropriate, as they relate to the staging area at 2825 Lafayette Street, and access routes that are within the city boundary.

    c. Please state whether underground utilities or above-ground power poles would need to be installed at the staging area. If subsurface excavation is required, please indicate the depth of disturbance, then discuss and mitigate as appropriate in the revised report. If above-ground construction at the staging area has the potential to cause temporary visual impacts on adjacent historic structures or districts, then discuss and mitigate as appropriate in the revised report. If there is no potential for either underground or above-ground project related impacts at the proposed staging and parking area, then please clearly state there is no such potential.

d. Please state whether the proposed improvements would involve ground-disturbing activities at the intersection of Trimble Road and Orchard Parkway (DayZenLLC 2022a, page 18). Please indicate the depth of potential disturbance if known. If this location has not been surveyed for cultural resources within the last five years, then a survey is necessary unless otherwise justified. If this is so, please clearly state this in the revised CLR text.

RESPONSE TO DATA REQUEST 59

See Response to Data Request 57.

BACKGROUND: Built Environment Study

The literature review states that "PaleoWest archaeologist, Erin Dresser, surveyed the approximately 22-acre project area on Friday, July 15, 2022" for archaeological resources (PaleoWest 2022a, page 17). Neither the application for SPPE nor the literature review state that a built environment survey was conducted by or under the direction of a qualified architectural historian.

In reviewing data presented in the application (Burns & McDonnell 2020, Appendices E– F), staff has identified multiple built environment and other potential historic resources surrounding the project site (DayZenLLC 2022b). Table 1 summarizes these findings.

Table 1. Unrecorded 45+ Year Old Potentially Historic Resources in Project Area

Resource	EDR Aerials Appendix F	EDR USGS Maps Appendix F	Recommendations
Transmission Line	1956: Possible building or structure (probably transmission line tower) at SW end of project site. 1963 – 1974: Definite building and/or structure (probably transmission line tower) at SW end of project site.	1961: San Jose, USGS Topo Map - Possible building or structure (probably transmission line tower) at SW end of project site. 1968-1980: San Jose, USGS Topo Map - Definite building and/or structure (probably transmission line tower) at SW end of project site depicted crossing SW'ly end of project site.	This tower, or a more recent replacement tower, appears to exist within the project site today. Please determine if this potential historic resource is within the project site and/or project area and if it is 45+ years in age. If so, please prepare Department of Parks and Recreation (DPR) 523 forms and document in the cultural resources report.

Resource	EDR Aerials Appendix F	EDR USGS Maps Appendix F	Recommendations
Industrial Buildings Across River from SW Corner of Project Area Built 1968-1974	1968: Not there. 1974: Constructed substantially as existing. **Note:** Google Earth Parlay records as built 1973-1974.	1968: San Jose, USGS Topo Map – Buildings not there. 1973: San Jose, USGS Topo Map – Buildings not there. 1980: Buildings constructed substantially as existing.	Please determine if these potential historic resources are within the Built Environment survey project area and if they are 45+ years in age. If so, please prepare DPR 523 forms and document in the cultural resources report.
Guadalupe River Channel	1956: Partially channelized Guadalupe River with levees depicted to SE of project site. 1963: Fully channelized and realigned Guadalupe River depicted to SE of project site.	1953: San Jose, USGS Topo Map – Partially channelized Guadalupe River with levees depicted on either side of river to SE of project site. 1961: San Jose, USGS Topo Map – Fully channelized and realigned Guadalupe River depicted to SE of project site.	Please determine if this potential historic resource is within the project area and if it is 45+ years in age. If so, please prepare DPR 523 forms and document in the cultural resources report.
101 Freeway	1939: Major roadway alignment depicted. 1948-Present: Major divided roadway alignment depicted. 1956: No offramp depicted. 1963: Offramp depicted.	1953: San Jose, USGS Topo Map – 2 lanes each direction. 1961: San Jose, USGS Topo Map – 3 lanes each direction + off ramp under construction.	Please determine if this potential historic resource is within the Project Area and if it is 45+ years in age. If so, please prepare DPR 523 forms and document in the cultural resources report.
Mission Santa Clara de Asis (Site)		1953: San Jose, USGS Topo Map – Mission Site depicted as outline at SE corner of project site.	Conduct research to determine location per Data Request #62, prepare any DPR 523 forms as necessary, and document in the cultural resources report.
Other potential Project Area historic properties 45+ years in age.			Appendix F contains pictures of the project site and vicinity. Several potentially historic features are depicted in the Project Area including a sanitary sewer vent, public sidewalk, curbs and gutters, etc. Please determine if these

Resource	EDR Aerials Appendix F	EDR USGS Maps Appendix F	Recommendations
			features or any features in the newly defined Project Area are 45+ years in age. If so, please prepare DPR 523 forms and present findings in the cultural resources report.

Following determination of an appropriate one-building/parcel-band surrounding the project site, CEC staff is requesting that PaleoWest address the following sites adjacent to the proposed project that appear to be at least 45+ years old. This should not be interpreted as meaning CEC staff recommends only evaluating the above noted properties as CEC staff research has been very limited. PaleoWest staff need to determine the actual construction dates, conduct historical research, and evaluate all 45+ year old historic properties within the project area in accordance with California Register of Historical Resources and/or local landmark guidelines. This will allow the CEC staff to properly evaluate potential impacts to built environment resources.

DATA REQUEST

60. Please conduct a built environment survey using a qualified architectural historian (Secretary of the Interior's standards for professional architectural historians). The survey must encompass the project site and the built environment study area defined in response to Data Request #55, including the identification of and evaluation of all linear features in the project site and associated with the staging/laydown area located at 2825 Lafayette Street, City of Santa Clara, California.

    Minimally, the CEC staff are requesting the following.

    a. A clear statement that all buildings within a one-building/parcel-band of the project site were surveyed and evaluated, and a description of how and by whom they were surveyed.

    b. How PaleoWest determined dates of construction for all historic properties within the project area or within a one-building/parcel-band of the project site.

    c. Some type of listing, figure, or simple table of all buildings noted by project site and project area with addresses, assessor parcel numbers, estimated dates of construction with a 45 +/- year old stylistic determination if an exact date is unknown, and a California Register of Historical Resources eligibility

determination. Other data may be listed based on consultant knowledge of the properties and consultant preferences.

RESPONSE TO DATA REQUEST 60

See Response to Data Request 57.

BACKGROUND: Properties Less than 50 Years Old

The draft CLR does not include a statement regarding Special Considerations whereby buildings and structures less than 50 years old are evaluated using California Environmental Quality Act or City of San José guidelines. Preliminary research conducted by staff indicates that several such buildings exist immediately adjacent to what would eventually be called the project site and/or within the newly defined project area.

DATA REQUEST

61. Specifically identify any properties less than 50 years old within the future defined project area. Please provide a statement regarding Special Considerations for any such historic properties and a listing or table by address or parcel for any properties so evaluated.

RESPONSE TO DATA REQUEST 61

See Response to Data Request 57.

BACKGROUND: Mission Santa Clara De Asis Location

The CEC staff have conducted limited historic research resulting in a 1953 San Jose Quad 15 Minute United States Geological Survey topographic map shows the Mission Santa Clara de Asís site as abutting the south end of the current Project Area (Burns & McDonnell 2020, Appendix F, page 11). A landmark was supposed to have been placed in this location by the Santa Clara Lions Club in 1953. This marker was relocated to the south of Highway 101 along De La Cruz Boulevard. The marker inscriptions suggest that the location marked on the 1953 topographic map, abutting the project area, was the location of the first Santa Clara Mission, which was built alongside an Ohlone village (HMdb.org 2023). The marker claims that the mission was located near the "Old Spanish Bridge". According to the 1866 GLO (general land office) Map, T6S R1W (Mount Diablo Meridian), the "Old Spanish Bridge" is marked at the southern portion of the current Project Area (GLO 1866).

The application for SPPE contains only passing references to the mission site and no discussion in text of the associated Spanish Bridge or Ohlone village site, nor does the SPPE application or CLR contain an analysis of potential impacts to these resources. (DayZenLLC 2022a, page 143; PaleoWest 2022a, page 5).

DATA REQUEST

62. If revisions to the CLR as requested in Data Request #57 result in evidence of Santa Clara De Asís Mission facilities or activities and the associated Ohlone village having been located near or within the project site, then:

    a. Specifically address these possible cultural resources in the recommendations section of the cultural resources report with careful consideration of the potential impacts of the proposed project.

    b. Prepare new or update existing DPR 523 forms as necessary.

RESPONSE TO DATA REQUEST 62

See Response to Data Request 57.

BACKGROUND: Discussion of Record Search Data

The CLR lacks discussion of prehistoric resource results from the record search and therefore it is difficult to assess the probability of below ground resources within the future defined project site. Further, the lack of a description of these resources and their potential relationship to the prehistoric and ethnographic setting makes the assessment of the significance of potential below ground or undetected surface cultural resources difficult.

DATA REQUEST

63. Include in the revised cultural resources assessment report a discussion of the known recorded prehistoric resources within the study area, how these resources relate to the overall cultural background, and what specific recommendations are proposed in consideration of the known record. Please also provide copies of all reports within the 0.5-mile record search boundary and any site records not included in Appendix A of the CLR.

RESPONSE TO DATA REQUEST 63

See Response to Data Request 57.

BACKGROUND: Native American Heritage Commission Request and Tribal Outreach

The application for SPPE does not document what geographic area the applicant asked the Native American Heritage Commission (NAHC) to search its Sacred Lands File and Native American contacts database (DayZenLLC 2022a). The NAHC letter from July 27, 2022, requests specific consultation with the North Valley Yokuts Tribe. The CLR provides no context or discussion of consultation with the North Valley Yokuts Tribe nor any further consultation/outreach with other Native American communities per the NAHC response letter.

DATA REQUEST

64. Please specify the geographic search area requested of the NAHC and add to the cultural resources assessment report any dates and results of consultation with Native American contacts provided by the NAHC. Also, please provide additional missing data, including but not limited to historic context and setting, as this information will facilitate the better understanding of cultural issues to the public.

RESPONSE TO DATA REQUEST 64

See Response to Data Request 57.

BACKGROUND: Ground Disturbance

Neither the SPPE Application nor the CLR clearly discuss the depth of all proposed ground disturbance.

DATA REQUEST

65. Include the location(s) of all ground disturbing activity proposed as part of the project and the depth of each identified disturbance in the cultural resources assessment report.

RESPONSE TO DATA REQUEST 65

See Response to Data Request 57.

HAZARDS AND HAZARDOUS MATERIALS

BACKGROUND: Diesel Fuel Transfer Between the Underground Storage Tanks and the Backup Generators

The backup generators would use diesel fuel supplied from eight underground storage tanks (UST) located on the north and south of each building. Sixteen 3,000 kilowatt (kW) generators and one 500 kW administrative generator would be located within each building. These generators would be located within designated interior generator rooms within the two buildings. Each floor would have 4 backup generators except the 2nd floor which would house the administrative generator. Additionally, diesel exhaust fluid would be stored in 55-gallon drums in each of the interior generator rooms. The application does not provide a description of how the fuel would be delivered to the backup generators nor does it include any discussion of safety measures for leaks or spills of fuels during initial filling of these tanks or during operation.

DATA REQUESTS

66. Please provide a discussion of how the fuel (both diesel fuel and diesel exhaust fluid) would be transferred to the backup generators from the USTs. Please provide locations of exterior and interior piping that may be used for fueling.

RESPONSE TO DATA REQUEST 66

The building will include 4 fuel oil pump rooms on the 1st level. Each room will contain a duplex fuel oil and DEF (diesel engine fuel) pump set. The fuel oil pumps in each room serve one generator per level (stacked). Fuel oil piping is routed inside the building and contained to the fuel oil pump room and generator rooms. Fuel is transferred to 500 Gallon day tanks in each generator room. Day tank supply pumps transfer fuel oil to generators. The DEF pumps in each fuel pump room serve one generator per level (stacked). DEF is routed inside the building and contained to the fuel oil pump room and generator rooms. DEF is transferred to 500 Gallon day tanks in each generator room. Day tank supply pumps transfer DEF to generators.

67. Please provide a discussion of safety measures that would be used during the initial filling of the backup generators to prevent spills or leaks.

RESPONSE TO DATA REQUEST 67

- Prior to initial fill, the completed system will be tested and commissioned to ensure system is free from leaks and all safety devices and alarms are in working order.

- USTs, day tanks and fill system will be permitted, listed for intended use and include anti spill and overfill protection safety features.
    - Spill containment fill boxes with hand pump
    - Tight fill adapter
    - Tank level gauges and sensors
    - Emergency pump shut-off on high level alarm and leak detection
    - Leak detection monitoring system
    - Visual and Audible alarm annunciator system
    - Inspection ports
    - Normal/emergency vents
- Tank sized to accommodate fuel expansion.
- Tanks and exterior piping feature secondary containment and monitoring to protect against primary tank leaks.
- Grounding system to prevent ignition of vapors which could lead to tank rupture.
- Absorbent material readily available on site for cleanup.

68. Please provide a discussion of safety measures that would be used in the event of spills or leaks of fuel piping or day tanks during general operation.

RESPONSE TO DATA REQUEST 68

- Prior to initial fill, the completed system will be tested and commissioned to ensure the system is free from leaks and all safety devices and alarms are in working order.
- USTs, day tanks and fill system will be permitted, listed for intended use and include anti spill and overfill protection safety features.
    - Spill containment fill boxes with hand pump
    - Tight fill adapter
    - Tank level gauges and sensors
    - Emergency pump shut-off on high level alarm and leak detection
    - Leak detection monitoring system
    - Visual and Audible alarm annunciator system
    - Inspection ports

    - Normal/emergency vents
- Tank sized to accommodate fuel expansion.
- Tanks and exterior piping feature secondary containment and monitoring to protect against primary tank leaks.
- Grounding system to prevent ignition of vapors which could lead to tank rupture.
- Absorbent material readily available on site for cleanup.

LAND USE

BACKGROUND: Consistency with Land Use Plans and Policies

The Land Use analysis is largely focused on evaluating consistency of the project with municipal government agency plans, policies, and regulations, including the Envision San José 2040 General Plan, the City's zoning ordinance, and the Comprehensive Land Use Plan (CLUP) for the San José International Airport. Because the proposed project would be located inside the Airport Influence Area (AIA), staff's analysis of consistency with policies and regulations addressing airport safety and airspace protection will compose a significant part of staff's analysis.

In the response to Data Request #43 in Set 1, it states: "Microsoft has received City Departmental/Agency comments/requests for project revisions and potential conditions of approval. The Microsoft design team is currently responding to these comments and preparing plan revisions." Staff presumes that the City's comments address specific policies and regulatory compliance issues, such as requiring an avigation easement as a condition of approval in accordance with Policy G-5 of the CLUP. Staff's Land Use analysis walks through each applicable policy or regulatory requirement and provides information to justify consistency conclusions. Having access to the City's comments and requests would allow staff to document the City's views on satisfying its requirements for the project.

DATA REQUEST

69. Please provide a copy of the City's departmental and agency comments and requests for project revisions and potential conditions of approval.

RESPONSE TO DATA REQUEST 69

Please see Appendix LU DR-69.

ATTACHMENT LU DR-69

City of San Jose SUP Application Comments

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Planning, Building and Code Enforcement

RESPONSES BY THE DESIGN TEAM ARE IN RED.

January 13, 2023

Chad Mendell
Environmental Systems Design
233 S Wacker Drive, Suite 5300
Chicago, Illinois 60606
cmendell@esdglobal.com

LOCATION AND ADDRESS: West of Orchard Parkway, South of Trimble Road at Unaddressed Parcel on Orchard Parkway

ASSESSOR'S PARCEL NUMBER: 101-02-020

RE. File No. SP22-029: Special Use Permit to allow the construction of two four-story data center buildings totaling approximately 630,000 square feet, three water storage tanks, two one-story utility buildings, a customer-owned power substation, a PG&E-owned high voltage switching station, and associated site improvements on a 22.29-gross acre site. The project includes the removal of eleven ordinance-size trees and eight non-ordinance-size trees.

Dear Chad Mendell,

Your application, referenced above, has undergone review for completeness and consistency with City policies and regulations. The purpose of this letter is to provide you with comments and revisions necessary for the project to meet City policies and ordinances so you can appropriately respond to the issues identified below. The comments below are based on the plans and information currently on file. Additional comments may be made at a later time when we receive revised plans and additional information. Please let me or the contact listed in the attached memos know if you have any questions regarding these comments.

Project Issues and Concerns

Based on review of your application, the items listed below are substantial issues that would affect the proposed project. These issues are explained in more detail in this letter.

1. The site plan identifies a portion of the project within area to be transferred as part of a future lot line adjustment with APN 101-02-019. Lot Line Adjustment File No. AT22-025 is under review pending final signoff by the Planning Director and City Surveyor. Please reference the new lot line boundaries and File No. AT22-025 in the resubmittal.

[Design Team Response: A reference to the Lot Line Adjustment file AT22-025 has been added to the Civil Site Plan on Drawing 4.0.]

2. A Conditional Use Permit granted by the Planning Commission is required to operate the customer-owned power substation and PG&E-owned high voltage switching station. Planning staff will convert the file type and send the applicant the outstanding fees.

[Design Team Response: Acknowledged.]

Project Review

1. Project Description

Based on the information you provided, we understand the project is to construct two four-story data center buildings totaling approximately 630,000 square feet, three water storage tanks, two one-story utility buildings, a customer-owned power substation, and PG&E-owned high voltage switching station and associated site improvements. The project also includes the removal of eleven ordinance-size trees and eight non-ordinance-size trees.

2. General Plan Consistency

The subject site is designated as **Industrial Park and Combined Industrial/Commercial** within the Land Use/Transportation Diagram of the Envision San Jose 2040 General Plan.

Industrial Park: FAR Up to 10.0 (2 to 15 stories)

Combined Industrial/Commercial: FAR Up to 12.0 (1 to 24 stories)

The Industrial Park designation is differentiated from the Light Industrial and Heavy Industrial designations in that Industrial Park uses are limited to those for which the functional or operational characteristics of a hazardous or nuisance nature can be mitigated through design controls. The Combined Industrial/Commercial category allows a significant amount of flexibility for the development of a varied mixture of compatible commercial and industrial uses, including hospitals and private community gathering facilities. Properties with this designation are intended for commercial, office, or industrial developments or a compatible mix of these uses.

Analysis: The project site is largely within the Industrial Park land use designation with portion of the property adjacent to Orchard Parkway within the Combined Industrial/Commercial designation. The project's scope of work for data centers, water storage tanks, and electrical substations is consistent with the intent of both land use designations to support industrial activities. The project site is adjacent to office and research and development land uses to the north and south. The project at approximately 0.65 FAR is within the density limits of both land use designation (IP and CIC).

[Design Team Response: Acknowledged.]

The project is **consistent** with the following General Plan policies:

Business Growth and Retention Policy – IE-2.2: Attract and sustain a growing concentration of companies to serve as the economic engine for San Jose and the region, particularly in driving industries such as information and communication technologies, clean technology, bioscience, and other sectors based on creativity and innovation.

Analysis: Microsoft is a leading multinational corporation in information and communication technologies. Construction of a 630,000-square-foot data center is essential to future growth within the technology sector in San Jose and the region. Data centers are integral for a business's data storage, management, backup, and recovery.

[Design Team Response: Acknowledged.]

Business Growth and Retention Policy – IE-2.8: Encourage business and property development that will provide and generate revenue to support city services and infrastructure.

Analysis: Construction of a 630,000-square-foot data center will generate local revenue through sales tax, restate tax, and personal income tax to support city services and infrastructure.

[Design Team Response: Acknowledged.]

Broad Economic Prosperity Policy – IE-6.2: Attract and retain a diverse mix of businesses and industries that can provide jobs for the residents of all skill and education levels to support a thriving community.

Analysis: The *operation of data centers provides jobs for residents at all skill and education levels including operator managers, technicians, security guards, engineers, and maintenance staff.*

[Design Team Response: Acknowledged.]

3. Zoning Consistency

The subject site is in the CIC Combined Industrial/Commercial Zoning District (File No. C18-042). The CIC Combined Industrial/Commercial zoning designation is intended for commercial or industrial uses, or a compatible mixture of these uses, that support the goals of the Combined Industrial/Commercial general plan designation. The district allows for a narrower range of industrial uses, primarily industrial park in nature, but including some low-intensity light industrial uses.

Table 20-110 Allowed Uses

Use	Combined Industrial/Commercial (CIC)
Data center	Special Use
Office, general business	Permitted
Office, research and development	Permitted
Utility facilities, excluding corporation yards, storage or repair yards and warehouses	Conditional Use

Analysis: Per Table 20-110, utility facilities are a conditional use in the CIC zoning district. Based on the scope of work for a customer owned substation and PG&E-owned high voltage switching station, the application requires a Conditional Use Permit (CUP). The data center, which typically requires a Special Use Permit, would be reviewed under the primary CUP. Following applicant confirmation, Planning staff will convert the file type and send the applicant the outstanding fees.

[Design Team Response: Acknowledged. Please send the new CUP application number and any additional permit application fees that will be required.]

Development Standards

Setbacks	Combined Industrial/Commercial Requirements	Provided
Front	Building – 15 feet Parking and circulation, passenger vehicles – 20 feet Parking, trucks and buses – 40 feet Loading docks – 60 feet	Complies. Please identify all setbacks.
Side	Building and structures – 0 feet Parking and circulation, passenger vehicles – 0 feet Parking, trucks and buses – 0 feet	Complies. Please identify all setbacks.
	Loading docks – 0 feet	
Rear	Building and structures – 0 feet Parking and circulation, passenger vehicles – 0 feet Parking, trucks and buses – 0 feet Loading docks – 0 feet	Complies. Please identify all setbacks.
Height	50 feet, unless a different maximum is established in Chapter 20.85	See analysis below.
Minimum street frontage	60 feet	Approximately 340 feet. Complies.

Analysis: The project is consistent with the minimum front, side, and rear setback requirements shown above. Please provide setback dimensions on a revised site plan for each. Per SJMC Section 20.85.020(D), the maximum building height for this property within a light rail corridor (LRT) / BART transit area is 150 feet. The project complies at a building height of 135'-6". See the map of Specific Height Limitation Areas for additional information.

[Design Team Response: Acknowledged. The Site Plan on Drawing 3.1 provides dimensions of setbacks and easement.]

- **Standby Generator Requirements**
  - Per SJMC Section 20.80.2030(B) the standards for stand-by and back-up electrical power generation uses are as follows:
    - Maximum noise levels, based upon a noise analysis by an acoustical engineer, will not exceed the applicable noise standards.
    - If the applicable maximum air quality or noise standards are exceeded in the open space, agricultural, or any commercial or industrial zoning district, a conditional use permit shall be required.
    - A Bay Area Air Quality Management District (BAAQMD) permit has been issued for the use or facility.
    - Operation of a temporary stand-by or backup power generation facility,

by definition, shall not exceed a maximum time period of four (4) consecutive months in any twelve (12) month period.

- Testing of generators is limited to 7:00 a.m. to 7:00 p.m., Monday through Friday.

Analysis: Provide a noise analysis prepared by an acoustical engineer certifying that the noise standards will not exceed those limitations in an industrial zoning district. Provide documentation of an issued BAAQMD permit. Ensure the operations plan aligns with the requirements above.

[Design Team Response: A property line noise / environmental noise study has been completed and has been added to the SUP / CUP documents as Document 012-MSC.]

- **Landscaping Requirements**
  - Tree wells in a parking lot shall be a minimum forty square feet, with a minimum five-foot net dimension.

    Analysis: Ensure landscaping plan identifies these minimum dimensions for tree wells.

[Design Team Response: Landscaping drawings 10.3 to 10.7 have been updated to show tree well dimensions and a note referencing these minimums.]

- **Parking Requirements**

  On December 6, 2022, the San Jose City Council adopted the Parking and Transportation Demand Management Standards Ordinance, which effectively eliminated off-street minimum parking requirements in the City. Developers are now required to provide transportation demand management (TDM) strategies in new projects to achieve a "TDM points target". Projects deemed complete by effective date of March 6 will have the option of complying with the old or new ordinance. Projects not deemed complete before March 6 will be required to use the new standards.

  Vehicle Parking Analysis (A): Per the updated ordinance, the proposed data center is classified as an Other Use – Level 2 because it will be greater than 300,000 square feet of gross floor area. The applicant should use Appendix C Menu of TDM Measures in the Transportation Demand Management Guidelines to achieve a minimum of 5 TDM points. For example, the applicant may choose to provide bike and micromobility network improvements, transit network improvements, residential street improvements, or walking network improvements. See the sample TDM plans on page 5 of the "Guidelines".

  Vehicle Parking Analysis (B): The following applies if the project is deemed complete before March 6. Per the old ordinance, a data center requires 1 space per 250 square feet of office/meeting/technician workspace, plus 1 for each 5,000 sq. ft. of floor area, or fraction thereof devoted to computer equipment space. Based on approximately, 20,000 sq. ft. of office/meeting/technician space and 520,000 sq. ft. of area devoted to computer equipment, a total of 173 parking spaces is required. The project provides 148 space, resulting in a 15% requested reduction. A parking reduction must be companied by a

minimum of 3 transportation demand management strategies found in SJMC Section 20.90.220(A)(1).

[Design Team Response: If the project is approved after March 6, 2023 (A) then the project will achieve the 5 TDM points target via the reduced parking method already being proposed to address the VMT impact.]

Bicycle Parking Analysis (A): Per the updated ordinance, a data center (Other Use – Level 2) requires one space per 5,000 square feet of office/meeting/technician workspace, plus one space for each 50,000 sq. ft. of floor area, or fraction thereof devoted to computer equipment space. Based on approximately 20,000 sq. ft. of office/meeting/technician space and 520,000 sq. ft. of area devoted to computer equipment, a total of 16 bicycle parking spaces is required. The project complies with 14 short term and 2 long term provided.

[Design Team Response: Acknowledged.]

4. North San Jose Area Design Guidelines

The subject site is within the boundary of the North San Jose Development Policy Area. On May 17, 2022, the City Council approved a series of amendments to the North San Jose Area Development Policy that effectively retired the 2005 plan with respect to future development. However, the North San Jose Design Guidelines are still applicable and take precedence over the Citywide Design Standards and Guidelines.

- Locate surface parking lots behind or at the side of buildings

  Analysis: A majority of the surface parking lots are located in front of the buildings. Discuss the site or program constraints to siting the surface parking lots behind or at the side of the buildings.

[Design Team Response: Per the North San Jose Floodplain Management Policy, much of the east half of the site (Orchard Parkway side) is within a designated flood conveyance area. The flood conveyance area has requirements for maximum blockage by structures that make it infeasible to locate the buildings on the eastern half of the site (see Drawing 5.2 – Flood Sections). Instead, a switching station and substation will be located on the east side of the site, with equipment pads raised above the flood elevation and screen wall with opening along the bottom to allow flood water to pass below the wall.

The majority of parking will be between the data center buildings and the switching station/substation screen wall, screening it from both Orchard Parkway and the Guadalupe River Trail. This meets the intent of the Design Guideline by reducing the visibility of the parking from the frontage.]

- Place buildings parallel to the street edge to form a continuous street wall

  Analysis: The two buildings are setback significantly from Orchard Parkway. Discuss the site or program constraints to siting the buildings parallel to the street edge.

[Design Team Response: The two buildings are approximately parallel to the Orchard Parkway (which curves along the property frontage) and the Guadalupe River Trail along the back side of the site.

Per the North San Jose Floodplain Management Policy, much of the east half of the site (Orchard Parkway side) is within a designated flood conveyance area. The flood conveyance area has requirements for maximum blockage by structures that make it infeasible to locate the buildings on the eastern half of the site (see Drawing 5.2 – Flood Sections). Instead, a switching station and substation will be located on the east side of the site, with equipment pads raised above the flood elevation and screen wall with opening along the bottom to allow flood water to pass below the wall.]

- Buildings should be oriented parallel to existing streets and along the edges of a site to create a tight urban fabric

  Analysis: The two buildings are setback significantly from Orchard Parkway. Discuss the site or program constraints to siting the buildings parallel to the street edge.

[Design Team Response: The two buildings are approximately parallel to the Orchard Parkway (which curves along the property frontage) and the Guadalupe River Trail along the back side of the site.

Per the North San Jose Floodplain Management Policy, much of the east half of the site (Orchard Parkway side) is within a designated flood conveyance area. The flood conveyance area has requirements for maximum blockage by structures that make it infeasible to locate the buildings on the eastern half of the site (see Drawing 5.2 – Flood Sections). Instead, a switching station and substation will be located on the east side of the site, with equipment pads raised above the flood elevation and screen wall with opening along the bottom to allow flood water to pass below the wall.]

5. Citywide Design Standards and Guidelines

The project is subject to the Citywide Design Standards and Guidelines. These guidelines were developed to assist in the design, construction, review, and approval of commercial development in San Jose. These guidelines cover minimum project standards for achieving a high level of design quality. The North San Jose Design Guidelines take precedence over the Citywide Design Guidelines. However, the Citywide Design Standards apply where the North San Jose Design Guidelines are silent.

- 2.3.8 (S2) Tree wells must be at least four feet larger than the tree trunk diameter at maturity.

  Analysis: Provide a revised Landscape Plan identifying compliance with this and the following standards:

[Design Team Response: Landscaping drawings 10.3 to 10.8 have been updated to show dimensions and trunk sizes.]

  - 2.3.8 (S3) Designate 700 cubic feet of non-compacted soil for small trees, 1400 cubic feet of non-compacted soil for medium trees, and 2100 cubic feet of non-compacted soil for large trees to allow trees to reach their maturity. Structural soil systems, soil cells, or continuous trenches are example of ways to reach to

the above soil volumes.

[Design Team Response: Landscaping drawings 10.4, 10.5, 10.6 and 10.9 have been updated with structural soil notes, callouts and details added to the drawings.]

- 2.3.8 (S5) Provide the following minimum distances from the center of trees to the edges of buildings for all trees to reach maturity and to prevent unnecessary tree removal:
  - Five feet for small trees,
  - 12 feet for medium trees, and
  - 20 feet for large trees

[Design Team Response: Landscaping drawings 10.3 to 10.7 have been updated with tree locations adjusted and notes added to the landscaping plan sheets for conformance.]

- 2.3.8 (S8) Utilize at least 50 percent of the total landscaped area on a development site for LID site design measures, source controls, and green stormwater infrastructure, including but not limited to bioretention, rain gardens, LID planters, and permeable pavers.

[Design Team Response: Greater than 50% of site landscaping will be LID (bioretention, self treating, or self-retaining areas). Greater than 50% of the proposed plants are low water use. This project will meet or exceed MWELO requirements for irrigation water usage.]

- 3.1.1 (S2) Within General Plan growth areas, provide building stepbacks from rear shared property lines and public rights-of-way within a stepback plane of 75 degrees from horizontal (see Fig. 3.4, 3.5, and 3.6).

  Analysis: Provide a site section showing compliance with this standard. Note the western façade is adjacent to the Guadalupe River Trail, a public right-of-way.

[Design Team Response: We have added the requested site section on Drawing 7.6 to show compliance with building step back plane. Drawing 3.1 also references the section that is located on Drawing 7.6.]

- 3.3.1 (S1) Articulate all building facades facing a street or public open space for at least 80 percent of each façade length. Articulate all other building facades for at least 60 percent of each façade length.

  Analysis: Provide an exhibit illustrating compliance with this and the following standard:

[Design Team Response: To comply with the 80% of facade length required to be articulated, the facade design will use dimensional stucco panels. Refer to elevations on Drawing 7.1 and renderings on Drawing 7.4.]

- 3.3.2 (S1) Break the continuity of roofs with horizontal eaves more than 150 feet in length using gables, building projects, or other building articulation.

[Design Team Response: Based on guidance provided by Jonathan Fox on 02/17/2023, the

proposed flat roof design does not trigger standard 3.3.2 (S1) and this standard would therefore not apply to our project.

Although this comment does not apply to the building design, the Design Team has adjusted the horizontal band reveal that runs beneath the parapet of the roof screen wall to increase the height and increase depth to further separate the parapet from the facade. This adjustment provides a visual distinction between screen wall and walls of the building. Elevations on Drawings 7.1 and 7.2 and renderings on Drawing 7.4 show the parapet horizontal band reveal adjustment.]

- 3.3.6 (S1) For non-residential uses, apply a bird safety treatment on areas of glazing within 10 feet of a building corner.

  Analysis: Provide a revise elevation or separate exhibit illustrating compliance with this and the following standard:

[Design Team Response: Drawing 7.5 originally indicated frit on the glazing to achieve a bird-safe design. We have updated the note on Drawing 7.t to indicate the use of a Bird-Safe Frit on the building glazing.]

  - 3.3.6 (S2) For non-residential uses, apply a bird safety treatment to glazed areas of any building façade with more than 10 percent of glazing that is within 15 vertical feet and 20 horizontal feet of a green roof or a vegetated courtyard, within or outside of the development.

[Design Team Response: Refer to our response to 3.3.6 (S1).]

- 3.3.7 (S3) For buildings taller than four stories, limit the use of stucco to a maximum of 60 percent of any façade that faces a street, open space, or paseo in General Plan growth areas.

  Analysis: The exterior insulation finishing system (EIFS) panel resembles stucco. Describe or illustrate how this material will differentiate from stucco. Provide a revised elevation or separate exhibit illustrating compliance with standard and the following:

[Design Team Response: To show compliance, we have highlighted the stucco portion on key plan elevations located on Drawings 7.1 and 7.2. Surface area calculations have been added for the overall elevation area and the percentage that is stucco.]

  - 3.3.7 (S4) For buildings taller than four stories, do not provide unbroken multi-story sections of the same material, texture, or color for more than 150 feet of façade length and more than two-thirds of the number of floors in height.

[Design Team Response: Based on Fire Department interpretation, the building is 4 story with a parapet around the roof to screen the mechanical equipment on the roof. Therefore, this comment should not apply. That said, through existing and new proposed 9" horizontal bands, materials are broken up at the façade.]

- Section 5.2.6 – Data Centers
    - When designed without proper considerations, a data center may resemble a warehouse. It is imperative to design data centers that interact with the public realm and add to the character of their surroundings, especially when they are located near active streets, pedestrian areas, or designated Growth Areas.

      Analysis: As presently designed, the data center does not interact with Orchard Parkway or the Guadalupe River Trail. The applicant should discuss and/or provide a site constraints analysis to discuss the rationale behind siting the power generation utilities at the front of the parcel.

[Design Team Response: The Design Team believes that the submitted building design does not show as a warehouse and does express the human components of the facility through the portions of glazing, main entry and horizontal banding.

The use of massing, material and glazing treatment on the façade is a balanced design that enhances the surrounding context along Orchard Parkway and Guadalupe Trail. The building meets the functional requirements through understated gestures to present as an office building and not a warehouse. The proposed data center is of a higher quality of design than other similar buildings in the region.

Site shape (triangle) and minimal frontage at Orchard Parkway (approximately 350 linear feet) are not advantageous for locating the buildings in the narrowest portion of the site.

Per the North San Jose Floodplain Management Policy, much of the east half of the site (Orchard Parkway side) is within a designated flood conveyance area. The flood conveyance area has requirements for maximum blockage by structures that make it infeasible to locate the buildings on the eastern half of the site (see Drawing 5.2 – Flood Sections). Instead, a switching station and substation will be located on the east side of the site, with equipment pads raised above the flood elevation and screen wall with opening along the bottom to allow flood water to pass below the wall.]

6. Applicable City Council Development Policies

- Public Noticing (On-Site Posting)
- Public Outreach Policy for Pending Land Use and Development Proposals
- Lighting: Outdoor Lighting on Private Developments
- Post-Construction Urban Runoff Management
- Riparian Corridor Protection and Bird-Safe Design

Council Policy 6-30 – Public Outreach Policy (Community Outreach)

Based on the scale and scope of the project, at least one community meeting will be required prior to any public hearings for this project. This meeting should be scheduled early in the project's review. At this moment, we are scheduling virtual community meetings. The City will provide public notice of this meeting to property owners and tenants within 1,000 feet of the proposed site. The meeting should follow the procedures of the City Council Public Outreach Policy. This meeting should be held at least one month prior to a public hearing.

- Please select a date, at least one month in advance of when you would like to host the meeting, to ensure sufficient time for noticing.
- It is recommended the meeting is held on either a Monday or Thursday evening, or if requesting Tuesday or Wednesday ensure that no public hearings (City Council/Planning Commission Commission) are scheduled on those evening dates.
- Meetings should start between 6 and 7 PM and last approximately one hour.
- Please coordinate with Councilmember David Cohen and District 4 Staff to confirm the date will work for their Staff. Please email district4@sanjoseca.gov to coordinate a date and time.
- Once you have tentatively selected the date and times, please provide at least 2 or 3 dates to confirm staff's availability.

[Design Team Response: The Design Team will conduct a community meeting to discuss the proposed project with the surrounding community. We will schedule a date and coordinate with Council Member David Cohen and District 4 Staff.]

Council Policy 6-34 Riparian Corridor Protection and Bird-Safe Design

The proposed 100-foot riparian setback is consistent with the minimum 100-foot setback required for buildings and parking facilities. Ensure that paved areas for parking facilities are oriented so as to not drain directly to the creek. Additionally, revise Sheet 002-S to identify the top-of-bank. Per Council Policy 6-34, setback is measured from "the outside dripline of the Riparian Corridor vegetation or top-of-bank, whichever is greater".

The project site is located outside of the Bird Safe Building Design Area found in Attachment A.

[Design Team Response:

- Drainage: All paved areas of the site and other impervious areas, such as building roads and equipment pads, drain into several proposed bioretention areas on site. From the bioretention areas, stormwater will be piped to the existing storm drain on Orchard Parkway. No runoff from the site will enter the Guadalupe River.
- 002-S Top of Bank: The Architectural Site Plan on Drawing 7.1, Sheet Note 37 has been revised to identify the top-of-bank. All proposed developments occur outside of the 100-foot Riparian Setback as measured from the top of the bank.
- Bird Safety Building Design Area: Acknowledged.]

On-Site Sign Requirement

Per the City's Public Outreach Policy, a sign describing the proposed project is required to be placed on each project site street frontage so it is legible from the street. Staff has not received the Declaration of Posting and photos. A hearing will not be scheduled until the sign is posted and the Declaration of Posting form is signed and returned. Any delay in the posting of the sign will result in the delay of the review and acceptances of revised submittals.

- Public Noticing (On-Site Posting)
- Public Outreach Policy for Pending Land Use and Development Proposals

[Design Team Response: The Design Team will work with a sign installation company for the placement of signs to provide public notice of the pending Conditional Use Permit application. This installation will meet the Public Outreach Policy requirements. Sign copy will be provided by the City of San Jose.]

7. Environmental Review - California Environmental Quality Act (CEQA)

Cassandra van der Zweep will be City's environmental review planner reviewing the proposed project. It is staff's understanding that the project is under environmental review with the California Energy Commission (as a Small Power Plant Exemption Application) and that the CEC is working as the lead agency on a Draft environmental document for the project. The City will coordinate the review of the environmental document with the CEC and intends to use the prepared document as a responsible agency. Should you, your environmental consultant, or the CEC have any questions regarding the project's environmental review, please contact Cassandra at Cassandra.vanderZweep@sanjoseca.gov.

Effective **January 1, 2023**, applicants who have projects on private property that require review under the California Environmental Quality Act (CEQA) must directly contract with an environmental consultant on the City's List of Approved Environmental Consultants. This list can be found here:
https://www.sanjoseca.gov/your-government/departments-offices/planning-building-code-enforcement/planning-division/environmental-review/city-list-of-approved-environmental-consultants

Please see Director Chris Burton's letter dated October 11, 2022 to builders and the development community (link: https://www.sanjoseca.gov/home/showpublisheddocument/90399/638011014786100000). Th is letter contains more about the decision regarding the required use of City-approved environmental consultants and how we are improving our Environmental Review process with respect to the March 2022 audit findings.
[Design Team Response: Yes, the California Energy Commission (CEC) is currently evaluating our Environmental Impact document as part of CEQA compliance. David J Powers and Associates is the Environmental Consultant on our Design Team; they are on the Approved Environmental Consultants list.]

8. Tree Removal Policy

The application submitted for this project indicates that the project will removing eleven ordinance-size trees and eight non-ordinance-size trees. A request for a tree removal permit may be included as part of an application for a development permit per Section 13.32.080 of the Municipal Code. Per the on-site tree mitigation table on Sheet 025-TR, the project requires seventy-one (71) 15-gallon trees to meet the mitigation requirements and one hundred fifty-two (152) 15-gallon trees are proposed.
[Design Team Response: Please include the Tree Removal Permit findings in the CUP resolution. Microsoft will mitigate the loss of ordinance and non-ordinance size trees as

reflected in proposed landscape plan.]

9. Plan Clarifications and Required Additional Information

- Provide an Operations Plan, see example here.

  [Design Team Response: Document 013-APP has been added to the application to provide an Operations Plan.]

- Provide a Commercial Linkage Fee Satisfaction Plan
  - See Housing Department memo dated 11/22/2022
  - Approval of CLF Satisfaction Plan required prior to deeming complete.

  [Design Team Response: Document 014-APP has been added to the application to provide a Commercial Linkage Fee Satisfaction Plan.]

- Identify all proposed setbacks for front, side, and rear

  [Design Team Response: Drawing 3.1 has been updated to show proposed setback dimensions.]

- Specify if PG&E easement affects at-grade, below-grade, or if only a Power Line Easement

  [Design Team Response: Where the PG&E 115kV line enters from the southwest (from the Guadalupe River Trail), an above ground easement will be granted to PG&E. Where the PG&E 115kV line enters from the southeast, an above ground and potentially a below ground easement will be granted to PG&E. We anticipate that the land that will be used for the PG&E Switch Station will ultimately be deeded to PG&E.]

- Provide a revised site section illustrating compliance with CWDSG 3.1.1

  [Design Team Response: Drawing 7.6 shows the requested site section to show compliance with building step back plane.]

- Provide a revise elevation illustrating compliance with CWDSG 3.3.6 and 3.3.7

  [Design Team Response: To comply with the 80% of facade length required to be articulated, the facade design will use dimensional stucco panels. To show compliance, we have highlighted the stucco portion on key plan elevations on Drawing 7.1 and 7.2. Surface area calculations have been added for the overall elevation area and the percentage that is stucco.]

- Provide a revised landscape plan illustrating compliance with CWDSG 2.3.8

  [Design Team Response: Landscaping drawings 10.3 to 10.8 have been updated.]

- Provide an elevation or detail for the proposed substation screening/wall

  [Design Team Response: The substation and switching station screen wall elevations and details have been added to Drawing 12.3.]

- Provide a Response to Comments for Planning and other departmental memos

[Design Team Response: Responses to the Public Works and Fire Departments have been provided in separate documents.]

10. Next Steps

Please be advised that this summary does not constitute a final review. Additional comments may be provided upon review of any additional information and plan revisions submitted in response to this letter. Please submit the revised Planned Development Permit plans San Jose's ePlan. Email or provide a link for the resubmittal of the Tentative Map, and response letters addressing all the comments in this letter and other department comments.

When ready, please submit all updated plans and documents to ProjectDox using the Planning File Naming Conventions. See additional information below regarding the naming conventions.

Description	Naming Example
Is it just a revision to an existing sheet?	First submittal sheet named 002-TS, Revised Sheet also name it 002-TS (do not put versions, updated etc)
Adding a sheet associated with existing sheet type (e.g. additional civil exhibits)	First submittal sheet named 007-C, additional sheet related to that sheet should be 007A-C

- Do not rename the sheet or document, even if you don't make changes, just submit under the previous sheet name.
- If you have sheets or documents with repeat number 002-A, 002-TS, 002-C in the files list, you are doing it incorrectly, each should be a unique sequence number or a sequence number with a suffix if additional pages added to the plan set e.g. 002A-A, 002B-A

Additional fees may be applicable for community meetings, additional public noticing, and for other processes/reviews as a result of revisions to the project description or plans, based on the adopted fee schedule. We will inform you should additional fees be required. The project will not be scheduled for hearing until all fees have been paid in full.

A Conditional Use Permit requires approval by the **Planning Commission**. Once the project plans are acceptable and all comments have been addressed, the project will be scheduled for public hearing. There is a four-week lead time prior to the hearing for preparation, distribution, and responses to the public notice, and for preparation of the draft permit.

Should you have any questions, you may contact me at jonathan.fox@sanjoseca.gov or (408) 535-7702. You can also contact the Supervising Planner overseeing this project, Laura Meiners at laura.meiners@sanjoseca.gov.

We look forward to continuing to work with you and your team on your project in San Jose.

Sincerely,

Jonathan Fox, Project Manager

RESPONSES BY THE DESIGN TEAM ARE IN RED.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: Jonathan Fox
Planning and Building

FROM: Cristina Lindstrom
Public Works

SUBJECT: INITIAL RESPONSE TO DEVELOPMENT APPLICATION

DATE: 12/16/22

Approved

Date 12/16/22

PLANNING NO.: SP22-029
DESCRIPTION: Special Use Permit to allow two 4-story data center buildings and two 1-story buildings with mechanical and electrical equipment consisting of 631,542 square feet on an approximately 22.29-gross acre site
LOCATION: 2515 Orchard Parkway
P.W. NUMBER: 3-03628

[Design Team Response: Update building area to 630,912 SqFt for the combined area of the SJC04, SJC06 and Guardhouse buildings. Ancillary areas for mechanical and electrical are not included on Drawing 3.1]

Public Works received the subject project on 11/16/22 and submits the following comments and requirements. **Upon completion of the Action/Revisions Required items by the applicant, Public Works will forward a Final Memo to the Department of Planning prior to the preparation of the Staff Report for Public Hearing.**

Information Only:

1. **Stormwater Runoff Pollution Control Measures:** On May 11, 2022 the Regional Water Quality Control Board approved an update to the Municipal Regional Permit (MRP 3.0) pertaining to the treatment of stormwater for Development projects. Effective July 1, 2023, the new MRP stormwater regulations will be implemented and the threshold for impervious surface created, modified and/or replaced will be reduced to 5,000 square feet (this includes any public right-of-way improvements as part of the project). Detached single-family homes creating, modifying and/or replacing over 10,000 square feet will also become regulated and require treatment. Current projects must receive their final Planning Permit approval (including appeal period) by June 30, 2023, or projects will be required to resubmit revised stormwater control plans and calculations to be reviewed under the new stormwater regulations.
[Design Team Response: Acknowledged.]

Actions / Revisions Required:

2. **Stormwater Runoff Pollution Control Measures:**
   a) Revise the Stormwater Evaluation Form (SEF) to include the following:

i) Update the Project File # to SP22-029.
[Design Team Response: Updated.]

ii) Update 3.b. to "Yes. Site Design, Source Control, and Treatment System requirements will all apply to the project area."
[Design Team Response: Updated.]

iii) Check "Preserve open space and natural drainage patterns" for 3.d. Site Design Measures.
[Design Team Response: Updated.]

iv) Update 3.d. Source Control Measures to match the Source Control Measures on the Stormwater Control Plan (SCP).
[Design Team Response: Updated.]

v) Revise the Source Control Measures Table and list all appropriate Source Control Measures selected in the most current C.3 Stormwater Evaluation Form on the Stormwater Control Plan.
[Design Team Response: Updated.]

vi) Ensure that sizing of bioretention areas is accurate. Proposed boulders in landscape plan will add impervious area to the TCM. Please show that these areas were excluded from the bioretention sizing. When possible, avoid placing boulders, light posts, etc. in bioretention areas as they can restrict at-grade flow.
[Design Team Response: Boulders are removed from the bioretention areas. Confirmed that the bioretention areas are sized appropriately.]

vii) Provide a note in the Landscape Plan that states "all mulch in bioretention cells should be 3 inches of composted, non-floatable material in areas between plantings." For guidance on the mulch, refer to the C.3 Stormwater Handbook Chapter 6.1, page 6-5 under "Vegetation."
[Design Team Response: This note has been added to landscape sheet L10.8.]

3. Street Improvements:

a) **Orchard Parkway:** Show an on-street Class IV protected bike lane along the Trimble Road project frontage per the CSJ Better Bike Plan and Class IV Bike Lane City Standards.
[Design Team Response: The Class IV bike lane has been added to Drawing 4.1A. The Class IV bike lane on Orchard will be funded by this Project and will be constructed by the City. This approach was reviewed and approved by Joe Provenzano.

Per our conversation with Joe Provenzano, the comment above should have indicated Orchard, not Trimble since our frontage is on Orchard, not Trimble.]

b) **Orchard Parkway/Component Drive**:

i) A signal modification is required at the Orchard Parkway and Component Drive intersection to appropriately signalize the bike crossing for the South and East bound directions and alignment of Class I bike lane. The modification will include but is not limited to:

a) Bike signal
b) Video Detection (VIDS)
c) Pan, Tilt, Zoom Surveillance Camera (PTZ)
d) Communication upgrades
e) Accessible Pedestrian Signal (APS)
f) High Visibility Back Plate (HVBP)

[Design Team Response: Comment acknowledged. Per email from Joe Provenzano on 2/9/23, a $55,000 fee can be paid in-lieu of these improvements. This in-lieu fee is the preferred option.]

c) Class I Bikeway Trail:

i) The connection of the bike trail to the top of the levee is required. A bike ramp detail will be provided. An encroachment permit from Valley Water will be required. Please visit the Bicycle Transportation Design Guidelines: https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp1000-a11y.pdf

[Design Team Response: Given that the bike trail connection to the top of the levee may require long-lead resource agency permits that are not otherwise triggered by the project (e.g., U.S. Army Corps of Engineers), the client is concerned that this bike path connection, which occurs outside of the client's owned property, jeopardizes and may delay the project schedule.

Therefore, we would like to propose that we continue to exclude the final connection between our property line and the existing Guadalupe Bike Trail (approximately 20 feet) for the purposes of the CUP, but our Project Team will take active steps to get this final connection approved by the Valley Water District, who owns/manages the Guadalupe Trail. If Valley Water approves our final connection during the design and/or construction phase of our Project, we will amend our Class I Bike Trail permit drawings to include the final connection.

NOTE: A Valley Water Encroachment Permit for the final connection to the Guadalupe Bike Trail was submitted by the Project Team on 02/09/2023 (SCVWD file no. 34822).]

ii) Valley Water has been notified of the impending connection and is in support of the work.

[Design Team Response: Acknowledged.]

iii) A recreational use easement is required for the trail to be publicly accessible.
[Design Team Response: This easement has been added to Drawing 4.0 and 4.1.]

d) Add a note indicating "Locate and protect of the Signal Interconnect Cable (SIC)" on the project frontage.
[Design Team Response: This note has been added to the civil site plan (Drawing 4.0) and utility plan (Drawing 4.4).]

4. **Site Plan:** Submit for a Lot Line Adjustment for the 1-acre to be acquired.
[Design Team Response: Lot line adjustment for the additional 1-acre has been submitted as AT22-025.]

5. **Referrals**: This project should be referred to the Valley Water for consideration.
[Design Team Response: Acknowledged.]

Project Conditions:

Public Works Clearance for Building Permit(s) or Map Approval: Prior to the approval of the Tract or Parcel Map (if applicable) by the Director of Public Works, or the issuance of Building permits, whichever occurs first, the applicant will be required to have satisfied all of the following Public Works conditions. The applicant is strongly advised to apply for any necessary Public Works permits prior to applying for Building permits. Standard review timelines and submittal instructions for Public Works permits may be found at the following: http://www.sanjoseca.gov/devresources.

6. **Construction Agreement**: The public improvements conditioned as part of this permit require the execution of a Construction Agreement that guarantees the completion of the public improvements to the satisfaction of the Director of Public Works. This agreement includes privately engineered plans, bonds, insurance, a completion deposit, and engineering and inspection fees.

7. **Transportation**: A Transportation Analysis has been performed for this project. We conclude that the subject project will be in conformance with the City of San Jose Transportation Policy (Council Policy 5-1) and a determination for less than significant impacts can be made with respect to transportation impacts.
   a) See separate Transportation Analysis Memo dated December 16th, 2022 for additional information.

8. Grading/Geology:
   a) A grading permit is required prior to the issuance of a Public Works Clearance.
   b) All on-site storm drainage conveyance facilities and earth retaining structures 4 foot in height or greater (top of wall to bottom of footing) or is being surcharged (slope of 3:1 or greater abutting the wall) shall be reviewed and approved under

Public Works grading and drainage permit prior to the issuance of Public Works Clearance. The drainage plan should include all underground pipes, building drains, area drains and inlets. The project shall provide storm drainage calculations that adhere to the latest California Plumbing Code as adopted under the City of San Jose Municipal Code Section 24.04.100 or submit a stamped and signed engineered design alternative for Public Works discretionary approval and must be designed to convey a 10-year storm event.

c) If the project proposes to haul more than 10,000 cubic yards of cut/fill to or from the project site, a haul route permit is required. Prior to issuance of a grading permit, contact the Department of Transportation at (408) 535-3850 for more information concerning the requirements for obtaining this permit.

d) Because this project involves a land disturbance of one or more acres, the applicant is required to submit a Notice of Intent to the State Water Resources Control Board and to prepare a Storm Water Pollution Prevention Plan (SWPPP)

for controlling storm water discharges associated with construction activity. Copies of these documents must be submitted to the City Project Engineer prior to issuance of a grading permit.

e) The Project site is within the State of California Seismic Hazard Zone. A geotechnical investigation report addressing the potential hazard of liquefaction must be submitted to, reviewed and approved by the City Geologist prior to issuance of a grading permit or Public Works Clearance. The report should also include, but not limited to: foundation, earthwork, utility trenching, retaining and drainage recommendations. The investigation should be consistent with the guidelines published by the State of California (CGS Special Publication 117A) and the Southern California Earthquake Center (SCEC, 1999). A recommended depth of 50 feet should be explored and evaluated in the investigation.

9. **Stormwater Runoff Pollution Control Measures:** This project must comply with the City's Post-Construction Urban Runoff Management Policy (Policy 6-29) which requires implementation of Best Management Practices (BMPs) which includes site design measures, source controls and numerically-sized Low Impact Development (LID) stormwater treatment measures to minimize stormwater pollutant discharges.

a) The project's Stormwater Control Plan and numeric sizing calculations are under review and this project will be in conformance with City Policy 6-29.

b) Final inspection and maintenance information on the post-construction treatment control measures must be submitted prior to issuance of a Public Works Clearance.

c) A post construction Final Report is required by the Director of Public Works from a Civil Engineer retained by the owner to observe the installation of the BMPs and stating that all post construction storm water pollution control BMPs have been installed as indicated in the approved plans and all significant changes have been reviewed and approved in advance by the Department of Public Works.

10. **Stormwater Peak Flow Control Measures**: The project is located in a non-Hydromodification Management area and is not required to comply with the City's Post-Construction Hydromodification Management Policy (Council Policy 8-14).

11. Flood: Zone AH, Elevation 27.00' 1988 National Geodetic Vertical Datum (NAVD88) and X

a) The project site is also located within the Updated 2006 North San Jose Floodplain Management Study (NSJFMS) area. The NSJFMS was updated to reflect the completed Downtown and Lower Guadalupe River Flood Protection Projects and to show the resulting blockage requirements for applicable projects in North San Jose.
   i) Based on the 2006 NSJFMS, ultimate conveyance shall not exceed 75% of the site perpendicular to flow of flood waters. Flow direction is south to north. Show the reserved flood conveyance path at the PD stage.
   ii) Lowest finished floor elevations of each building shall conform to the applicable minimum design elevations shown on the 2006 NSJFMS map. The minimum design elevation per the 2006 NSJFMS map range from 26.00 to 30.00' North American Vertical Datum of 1988 (NAVD88).

b) Elevate the lowest floor of the proposed buildings above **27.00' NAVD 88** or above the 2006 NSJFMS Update minimum design elevation, whichever is higher.

c) Non-residential structures may also be floodproofed to the same elevation. For insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the base flood elevation to receive rating credit.

d) An Elevation Certificate (FEMA Form 086-0-33), based on construction drawings, is required prior to issuance of a building permit. Consequently, an Elevation Certificate for each built structure, based on finished construction, is required prior to issuance of an occupancy permit.

e) If the structure is to be floodproofed, a Floodproofing Certificate (FEMA Form 086-0-34) for each structure, floodproofing details, and if applicable, a Flood Emergency Operation Plan and an Inspection & Maintenance Plan are required prior to the issuance of a Public Works Clearance.

f) Building support utility systems such as HVAC, electrical, plumbing, air conditioning equipment, including ductwork, and other service facilities must be elevated above the base flood elevation or protected from flood damage.

g) Construction materials used below the base flood elevation must be resistant to flood damage.

12. **Sewage Fees:** In accordance with City Ordinance all storm sewer area fees, sanitary sewer connection fees, and sewage treatment plant connection fees, less previous credits, are due and payable.

13. **Municipal Water**: In accordance with City Ordinance #23975, Major Water Facilities Fee is due and payable. Contact Ricardo Rubio-Benitez at (408) 535-8550 for further information.

14. **Environment Assessment of Easement Dedications:** A street easement dedication is required as part of this permit. An environmental assessment of the easement dedication area from an environmental consultant is required prior to recordation of the easement.

15. **Street Improvements**:

a) **Orchard Parkway:** Construct an on-street Class IV protected bike lane along the Trimble road project frontage per the CSJ Better Bike Plan and Class IV Bike Lane City Standards.

b) Orchard Parkway/Component Drive:

i) Install a bike signal at the Orchard Parkway and Component Drive intersection.

[Design Team Response: The Class IV bike lane on Orchard will be funded by this Project and will be constructed by the City. This approach was reviewed and approved by Joe Provenzano.]

ii) Install a signal modification at the Orchard Parkway and Component Drive intersection to appropriately signalize the bike crossing for the South and East bound directions and alignment of Class I bike lane.

[Design Team Response: The signal modification at the Orchard Parkway and Component Drive intersection will be funded by this Project and will be constructed by the City. This approach was reviewed and approved by Joe Provenzano.]

iii) A recreational use easement is required for the trail to be publicly accessible.

c) Applicant shall be responsible to connect the bike trail to the top of the levee. [Design Team Response: Given that the bike trail connection to the top of the levee may require long-lead resource agency permits that are not otherwise triggered by the project (e.g., U.S. Army Corps of Engineers), the client is concerned that this bike path connection, which occurs outside of the client's owned property, jeopardizes and may delay the project schedule.

The Client is concerned that a potentially long and complicated approval process with Santa Clara Valley Water and the Army Corp of Engineers will jeopardize our ability the complete the bike path and our ability to close out our project.

Therefore, we would like to propose that we continue to exclude the final connection between our property line and the existing Guadalupe Bike Trail (approximately 20 feet) for the purposes of the CUP, but our Project Team will take active steps to get this final connection approved by the Valley Water District, who owns/manages the Guadalupe Trail. If Valley Water approves our final connection during the design and/or construction phase of our Project, we will amend our Class I Bike Trail permit drawings to include the final connection.

NOTE: A Valley Water Encroachment Permit for the final connection to the Guadalupe Bike Trail was submitted by the Project Team on 02/09/2023 (SCVWD file no. 34822).]

d) Applicant shall be responsible to remove and replace curb, gutter, and sidewalk damaged during construction of the proposed project.

e) Applicant shall be responsible for adjusting existing utility boxes/vaults to grade, locating and protecting the existing communication conduits (fiber optic and copper) along the project frontage.
f) Dedication and improvement of the public streets to the satisfaction of the Director of Public Works.
g) Repair, overlay, or reconstruction of asphalt pavement may be required. The existing pavement will be evaluated with the street improvement plans and any necessary pavement restoration will be included as part of the final street improvement plans.

16. **Sanitary**:
a) The existing sanitary sewer has sufficient capacity to sustain the expected flow rate to the existing surrounding sanitary mains located in West Trimble Road. The project will not trigger any new capacity deficiencies in the existing condition.
b) The project is required to submit plan and profile of the private sewer mains with lateral locations for final review and comment prior to construction.

17. **Electrical**:
a) Existing electroliers along the project frontage will be evaluated at the public improvement stage and any street lighting requirements will be included on the public improvement plans.
b) Locate and protect existing electrical conduit in driveway and/or sidewalk construction.
c) Provide clearance for electrical equipment from driveways, and relocate driveway or electrolier. The minimum clearance from driveways is 10' in commercial areas and 5' in residential areas.

18. **Street Trees**: The locations of the street trees will be determined at the street improvement stage. Contact the City Arborist at (408) 794-1901 for the designated street tree. Install street trees within public right-of-way along entire project street frontage per City standards; refer to the current "Guidelines for Planning, Design, and Construction of City Streetscape Projects".

Please contact Michael Guo at michael.guo@sanjoseca.gov or (408) 806-4418 or me at cristina.lindstrom@sanjoseca.gov or (408) 793-5529 if you have any questions. You may also reach the Senior Engineer overseeing the project, Joe Provenzano at joe.provenzano@sanjoseca.gov, or (408) 535-8466.

Cristina Lindstrom

Cristina Lindstrom
Project Engineer
Development Services Division

RESPONSES BY THE DESIGN TEAM ARE IN RED.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

To: Jonathan Fox

From: Kathy Tee
Fire Department

Subject: INITIAL RESPONSE TO DEVELOPMENT APPLICATION

Date: 12/07/22

Re: Plan Review Comments
PLANNING #: SP22-029
DESCRIPTION: Special Use Permit to allow two 4-story data center buildings and two 1-story buildings with mechanical and electrical equipment consisting of 631,542 square feet on an approximately 22.29-gross acre site
LOCATION: 2515 Orchard Parkway
ADDRESS: 2515 Orchard Parkway (370 W TRIMBLE RD Bldg 91 Unit 91)
FOLDER #: 22 700671 DEV
[Design Team Response: Update building area to 630,912 SqFt for the combined area of the SJC04, SJC06 and Guardhouse buildings. Ancillary areas for mechanical and electrical are not included on Drawing 3.1]

The Fire Department's review was limited to verifying compliance per Chapter 5 of the 2019 California Fire Code (CFC) with City of San Jose Amendments (SJFC), related to site requirements:

- Fire Apparatus Access Roads (CFC Appendix D)
- Fire-Flow Requirements for Buildings (CFC Appendix B)
- Fire Hydrant Locations & Distribution (CFC Appendix C)

These comments are based on the following information from drawings dated 10/26/2022 by Sheehan Nagle Hartray Architects. The following information applies to both building SJC04 and SJC06.

- Area of Building(s): 315,639sf
- Number of Level(s): 4 levels
- Height of Building(s): 135'-6" (top of roof screen), 72'(level 4)
- Construction Type(s): 1B
- Occupancy Group(s): B, S-1, H-3

[Design Team Response: Update building area to 315,429 SqFt per building (SJC04 and SJC06 and 630,912 SqFt for the combined area of the SJC04, SJC06 and Guardhouse buildings. Ancillary areas for mechanical and electrical are not included on Drawing 3.1]

These comments should be used as a checklist during design and development of the project. Projects change somewhat as the detailed design commences. Site requirements may be impacted by these changes and must be revisited with the Fire Department.

Section 1 - Actions / Revisions Required:

1. **Current submitted plans and documents do not meet CBC/CFC, SJ Municipal code, and/or local policies, unless otherwise noted below. When and if these plans are conditionally approved all comments are assumed still to be unresolved and are to be addressed at the next phase of planning review / building review.**

2. **Please be advised that the Fire process may be closed in the effort of minimizing the possibility of delay on your Planning application. Closing the Fire Memo process shall not be deemed as the Fire approval on these items.**

3. With plan resubmittal, provide written responses to the comments noted in Section 1. All comments shall include plan set page number. These comments shall be substantially complete prior to planning approval, but some comments may be deferred to Building Permit Phase, on a case by case basis.

4. The applicant has the option to apply for a Fire Department Variance at the planning stage or during building permit application stage to mitigate deficiencies noted in this Section. The Variance Application will be an additional/separate permit, and it shall be submitted through SJePlans.

    - More information can be found at our SJePlans & Fire Permits City web page at the following url: https://www.sanjoseca.gov/your-government/departments-offices/fire-department/bureaus/fire-prevention-permits/san-jose/-fsiteid-1
    - The variance application can be obtained at the following url: https://www.sanjoseca.gov/home/showpublisheddocument/82097/637800309112170000
    - Variance shall be added to building plan set.

5. **Fire Department Development Review Fees.** When the initial Fire Review Fee is depleted, an additional fee will be required. Meeting requests and/or any additional time spent for review are charged extra at hourly project review rate.

6. **Building Features**. Confirm/provide building area, number of levels, height, construction type, and occupancy group information.

7. **Fire Apparatus Access Road.** The Fire Apparatus Access Road shall meet the requirements of CFC Appendix D with City of San Jose Amendments. Refer to: **https://www.sanjoseca.gov/home/showpublisheddocument/87696/637927252245200000**

    - approved all weather surface;
    - minimum 20 feet wide;

- minimum 13 feet 6 inch vertical clearance;
- designed and maintained to support a load of at least 75,000 pounds;
- minimum inside turning radius of 30 feet and an outside turning radius of 50 feet;
- approved turnaround provided if dead ends exceed 150 feet;
- maximum grade of 10%;
- A second point of access is required when a fire apparatus road exceeds 1,000 feet;
- Curbs are required to be painted red and marked as "Fire Lane - No Parking" under the following conditions: (show exact locations on plan)
  - Roads, streets, avenues, and the like that are 20 to less than 26 feet wide measured from face-of-curb to face-of-curb shall have curbs on both sides of the road painted and marked
  - Roads, streets, avenues, and the like that are 26 to less than 32 feet wide measured from face-of-curb to face-of-curb shall have one curb painted and marked

- Show on the plans that all exterior walls of the first story of the building(s) are within 150 feet from the access road as measured along the path of travel (CFC Section 503.1.1). Path of travel requires a minimum six (6) feet wide clear and unobstructed walkable surface. Path of travel is measure from building overhang to property line.

[Fire Department Evaluation: Both buildings have complied with the fire access requirements.]

8. **Aerial Apparatus Access Road (CFC Appendix D, Section D105).** Show location of aerial access road. This applies to buildings that exceed 30 feet in height (measured from the grade plane to eave of the pitched roof, the intersection of the roof to the exterior wall or the top of parapet walls, whichever is greater). Aerial access roads shall have a minimum unobstructed width of 26 feet, be positioned parallel to one entire side of the building and be located within a minimum of 15 feet and a maximum of 30 feet from the building.
   [Fire Department Evaluation: Both buildings have complied with aerial apparatus access road requirements.]

9. **Commercial and Industrial Developments (CFC Section D104).**
   - For buildings exceeding three stories or 30 feet in height – Two means of fire apparatus access are required.
   - For buildings exceeding 62,000 square feet in area – Two separate and approved fire apparatus access roads are required. Exception: Projects having gross area of up to 124,000 square feet are permitted to have a single access road when buildings are sprinklered.
   - Where two fire apparatus access roads are required, they shall be placed not less than one half the length of the maximum overall diagonal dimension of the lot or area served, measured in a straight line between accesses.

   [Fire Department Evaluation: Two means of fire apparatus access are required, and it appears that they were provided on Orchard Parkway.]

10. **Fire Hydrant Locations & Distribution.** Fire Hydrant Locations & Distribution shall meet the requirements of CFC Appendix C with City of San Jose Amendments.

- Determine the required number and spacing of fire hydrants per CFC Appendix C, Table C102.1; (or Refer to San Jose Fire Flow and Hydrant Policy 637599691933100000 (sanjoseca.gov)

- Show the spacing of the fire hydrants along the fire apparatus access roads on the plans.
- Demonstrate on plans that all exterior walls of the building(s) are within 400 feet from a fire hydrant. The distance should be measured from a fire hydrant on a fire apparatus access road, along the path of travel around the exterior of the building (and not by drawing a 400 feet radius around the fire hydrant). Path of travel requires a minimum six (6) feet wide clear walkable path from building overhang to property line.

[Fire Department Evaluation: The following information was provided on Drawing 3.2, Fire Access plan with hydrant layout, a copy of fire flow information from San Jose Water company shall be provided to demonstrate the required fire flow can be satisfied.]

11. **Fire Flow and Fire Hydrant Calculation and Layout:**
    a) Provide Fire Flow/Hydrant Calculations, including hydrant layout as part of the official drawing set, preferably on the Civil Utility Drawings.
        - Refer to the San Jose Fire Flow and Hydrant Policy: 637599691933100000 (sanjoseca.gov)
        - For calculating the Fire Flow for buildings with mixed construction type, refer to: 637608338845370000 (sanjoseca.gov)
    b) When SJFD receives the Fire Flow/Hydrant Calculations and layout drawings we will review and stamp.
    c) SJFD reviewed and stamped Fire Flow/Hydrant Calculations and layout drawings will be sent back for your use to coordinate with the Water Company in your area.
    d) When we receive the Water Company's Fire Flow Simulation/Confirmation and requirements are met then we will conclude with this comment.

[Fire Department Evaluation: The following information was provided on Drawing 3.2, Fire Access plan with hydrant layout, a copy of fire flow information from San Jose Water company shall be provided to demonstrate the required fire flow can be satisfied.]

Location:	Between Orchard Parkway and Guadalupe River near the intersection of Orchard Parkway and Component Drive
Address:	370 W Trimble Road, San Jose CA
Construction Type:	Type IB, IIB, V-B
Occupancy Group:	B, S-1, H-3, U, B

Buildings	SJC04 Building[2]	SJC06 Building[2]	Pump Station Building[2]	Guardhouse Building[2]
Area (SF)	315,639 SF	315,639 SF	2,900 SF	264 SF
Number of Stories	4	4	1	1
Height [1]	72'	72'	-	-
Construction Type	IB	IB	IIB (TBV)	V-B (TBV)
Occupancy Group	B, S-1, H-3	B, S-1, H-3	U	B
Required fire flow[2]	6,000 GPM	6,000 GPM	1,500 GPM	1,500 GPM
Required flow duration	4 hours	4 hours	2 Hours	2 Hours
Minimum # of hydrants	6	6	1	1
Average spacing between hydrants	250'	250'	500'	500'
Maximum frontage distance to hydrant	150'	150'	250'	250'

[1]**Height is measured from average grade to highest occupiable floor**

[2]**Hazard classification is assumed to be "Extra," meaning no fire flow reductions are taken per the San Jose Fire Flow and Hydrant Policy**

12. **Easements**. If any fire department related easements are required or if any easements already exist, provide a copy to SJFD and include a note about the Easement on the plans

    [Design Team Response: an EVAE note has been added to the Drawing 3.2.]

13. **Fire Department Connections**. The Fire Department Connection (FDC) should be located a minimum of 40 feet away from the building (where possible) and within 100 feet of a fire hydrant. The fire hydrant should be located so that hoses can be laid directly to the fire department connection without crossing a road or driveway.
    [Fire Department Evaluation: Both buildings are in excess of 200 feet long, therefore each building shall have a second FDC location. One FDC for both buildings were already shown on Fire Access plan and they both located 40 feet away from the building and within 100 feet of a fire hydrant.]

    [Design Team Response: A second FDC is now shown on the West side of both buildings on Drawing 3.2.]

14. **Fire Pump Room.** Location and access to the Fire Pump Room shall be pre-planned with SJFD. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment. Hence, fire pump rooms shall be directly accessible from the exterior of the building. A fire rated corridor may be acceptable for access depending on the location and configuration.
    [Fire Department Evaluation: Fire pump room for both buildings has a direct access from the exterior, location is acceptable.]

Section 2 – For Information Only: The following comments are provided for general information. These requirements shall be satisfied prior to the issuance of Fire and Building permits. This is not an all-inclusive list.

1. **Fire Sprinkler System.** Building(s) shall be provided with an automatic fire extinguishing system in accordance with CFC 903.2 and SJFC 17.12.620. Fire sprinkler systems shall be supervised by an approved central station to the satisfaction of the Fire Chief.

   Please be advised that a higher density design sprinkler system is required in a speculative building or portions of a building that is built for lease (office areas and retail area) with floor to ceilings height greater than 14 feet. See Item 3.2 and 3.3 of the link
   Fire Sprinkler Policy (sanjoseca.gov)

2. **Fire Alarm System**. Building(s) shall be provided with a fire alarm system as required by CFC 907.2.

3. **Standpipes Available During Construction.** All buildings under construction, three or more stories in height, shall have at least one standpipe for use during construction. Such standpipe shall be provided with fire department hose connections. Location(s) and numbers of standpipe(s) shall be reviewed and approved by the Fire Department.

4. **Fire Apparatus Access Road Gates**. Fire apparatus access road gates shall comply with all the requirements of CFC Appendix D, Section D103.5.
   637655246329770000 (sanjoseca.gov)

5. **Electric Fence**. Provide warning signs around the perimeter of the electric fencing, a lock box at the existing gate that can facilitate site access by the Fire Department and/or Police, and a means of shutting off the power to the electric-security fence.

6. **Emergency Responder Radio Coverage (ERRC).** ERRC is required throughout the area of each floor of the building. Communication repeaters may be required to be installed in the buildings. Please be advised of the pathway survivability requirements for ERRC Systems.
   637698245114530000 (sanjoseca.gov)

7. **Elevator to Accommodate Ambulance Stretcher.** Where elevators are provided in buildings four or more stories above grade plane, or four or more stories below grade plane, at least one elevator shall be provided to accommodate an ambulance stretcher (24 inches by 85 inches). Refer 2019 CBC Section 3002.4 for requirements.

8. **Street Number Visibility.** Street numbers of the buildings shall be easily visible from the street at all times, day and night. 637662056235400000 (sanjoseca.gov)

9. **Lock Boxes.** The project development shall provide lock boxes to the satisfaction of the Chief Building Official and Fire Chief. Refer to the following documents.
   637655246329770000 (sanjoseca.gov)

10. **HAZMAT.** A Hazardous Materials Plan Review shall be required to determine if the type and quantity of hazardous material is acceptable per code.
    For projects requiring hazmat plan review see the following link:
    637807990990970000 (sanjoseca.gov)
    When submitting construction documents, please include the list of all hazardous materials on the BOCIF form. The form can be found at the following link:
    Building Occupancy Classification Inventory Form (unidocs.org)

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