



Environmental Impact Report

Qume and Commerce Project

File No. H21-040, T21-040 and ER21-154

July 2022



Qume and Commerce Project

Draft Environmental Impact Report (Draft EIR)

File Nos. H21-040, T21-040, and ER21-154

SCH# 2022010603

Prepared by



July 2022

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EXECUTIVE SUMMARY

ES.1 Project Overview

The proposed Project would demolish all on-site improvements, including three existing structures, and construct four new industrial warehouse buildings with dock doors and associated site improvements. The proposed buildings would comprise a total of approximately 714,419 square feet (sf) with a floor area ratio (FAR) of 0.50 and maximum height of 48-feet. The Project would be consistent with the General Plan land use designation of Industrial Park (IP) and zoning district of Industrial Park (IP). The proposed Project is located at 2222 and 2350 Qume Drive and 2150 Commerce Drive (APN: 244-15-003, -029, and -030) in the City of San José, Santa Clara County, California.

The following is a summary of the significant impacts and mitigation measures addressed within this Draft Environmental Impact Report (Draft EIR). The project description and full discussion of impacts and mitigation measures can be found in the following chapters of this Draft EIR.

ES.2 Summary of Significant Impacts

The following table, **Table ES-1: Summary of Significant Impacts and Mitigation Measures**, summarizes the potentially significant effects of the Project on the environment and mitigation measures identified to reduce the effects to a less than significant level, where applicable and feasible. A significant effect on the environment means a substantial, or potentially substantial, adverse change on the environment. Impacts that are less than significant are not described in this summary and can be found in the text of Appendix B (Initial Study) of this Draft EIR.

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Table ES-1: Summary of Significant Impacts and Mitigation Measures

Significant Impacts	Mitigation Measures	Significance After Mitigation
Air Quality		
<p>Impact AQ-1: Without mitigation, construction activities associated with the proposed Project could expose sensitive receptors near the Project site to cancer risk due to toxic air contaminants (TAC) emissions that could exceed BAAQMD threshold for cancer risk of 10 per million by 5 per million.</p>	<p><i>AQ-1 Tier 4 Final Construction Equipment</i></p> <p>Prior to issuance of any demolition, grading, and/or building permits (whichever occurs earliest), the Project applicant shall prepare and submit a construction operations plan that includes specifications of the equipment to be used during construction to the Director of Planning, Building and Code Enforcement or the Director’s Designee. The plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying that the equipment included in the plan meets the standards set forth below.</p> <ul style="list-style-type: none"> ▪ For all construction equipment larger than 25 horsepower operating on the site for more than two days continuously or 20 total hours, shall, at a minimum meet U.S. EPA Tier 4 Final emission standards. ▪ If Tier 4 Final equipment is not available, all construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85 percent reduction in particulate matter exhaust and 40 percent reduction in NOx in comparison to uncontrolled equipment. <p>Prior to the issuance of any demolition, grading, and/or building permits, the project applicant shall submit a construction operations plan prepared by the construction contractor that outlines how the</p>	<p>Less than Significant</p>

Significant Impacts	Mitigation Measures	Significance After Mitigation
	<p>contractor will achieve the measures outlined in this mitigation measure. The plan shall be submitted to the Director of Planning, Building and Code Enforcement or the Director’s designee for review and approval prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest). The plan shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> ▪ List of activities and estimated timing. ▪ Equipment that would be used for each activity. ▪ Manufacturer’s specifications for each equipment that provides the emissions level; or the manufacturer’s specifications for devices that would be added to each piece of equipment to ensure the emissions level meet the thresholds in the mitigation measure. ▪ How the construction contractor will ensure that the measures listed are monitored. ▪ How the construction contractor will remedy any exceedance of the thresholds. ▪ How often and the method the construction contractor will use to report compliance with this mitigation measure. <p>Implementation of the mitigations described above will reduce the impacts to cancer risk from 15 per one million to 2 per one million. This is below BAAQMD significance thresholds of 10 per one million for cancer risk.</p>	
Biological Resources		
Impact BIO-1: Construction activities associated with the proposed	<p><i>BIO-1 Tree Protection Plan</i></p> <p>Prior to issuance of any demolition, grading, and/or building permits</p>	Less than Significant

Significant Impacts	Mitigation Measures	Significance After Mitigation
<p>Project would remove on-site trees, reducing pockets of forage and cover for native and/or migrating bird species, which could potentially interfere substantially with the movement of native resident species or movement of a migratory wildlife species.</p>	<p>(whichever occurs earliest), the Project applicant shall prepare a Tree Protection Plan that identifies any on-site trees to be protected and associated protection protocol. The Tree Protection Plan shall be prepared by a certified arborist and shall consider the findings and recommendations provided in the Project Arborist Report (Appendix E of Draft EIR). Further, the Tree Protection Plan shall be consistent with relevant industry standards and best management practices, including but not limited to the International Society of Arboriculture, California Oak Foundation, and the City of San José Community Forest Management Program. The Tree Protection Plan shall be submitted to the Director of Planning, Building and Code Enforcement, or the Director’ designee, for review and approval prior to issuance of any demolition, grading and/or building permits (whichever occurs earliest). The plan shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> ▪ An exhibit identifying the location and identification numbers of on-site trees to be protected. ▪ Tree driplines and Tree Protection Zones (TPZs) to be maintained around each tree (or grove of trees). ▪ Protection measures for each development phase (e.g. pre-construction, demolition, grading, construction). ▪ How the construction contractor will ensure the protection measures are monitored. ▪ Recommendations for any on-site monitoring of construction activities by a certified arborist, as needed. ▪ Communication protocol in the instance that damage to on-site trees occurs during construction. 	

Significant Impacts	Mitigation Measures	Significance After Mitigation
	<ul style="list-style-type: none"> ▪ How often and the method the construction contractor will use to report compliance on this mitigation measure. <p>Implementation of the mitigations described above will reduce the impacts resulting from tree removals to less than significant level.</p> <p>BIO-2 Preconstruction Bird Surveys</p> <ul style="list-style-type: none"> ▪ Nesting Bird Surveys: The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive). If demolition and construction are scheduled to occur between August 31st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during Project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of breeding season (May 1st through August 31st inclusive). During this survey the qualified ornithologist shall inspect all trees and other possible nesting habitats within 250 feet of the construction areas for nests. ▪ Buffer Zones: If an active nest is found within 250 feet of the work areas to be disturbed by construction, the qualified ornithologist shall determine the extent of a construction free buffer zone to be established around the nest, (typically 250 feet for raptors and 100 feet for other birds), to ensure that raptor or migratory bird nests shall 	

Significant Impacts	Mitigation Measures	Significance After Mitigation
	<p>not be disturbed during Project construction. The no-disturbance shall remain in place until the ornithologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more then resumes again during the nesting season, an additional survey shall be necessary to avoid impacts to active bird nests that may be present.</p> <ul style="list-style-type: none"> ▪ Reporting: If a pre-construction survey is required, prior to any tree removal and construction activities or issuance of any demolition, grading or building permits (whichever occurs first), the qualified ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning, Building and Code Enforcement or the Director’s designee. <p>Implementation of the mitigations described above will reduce the impacts to nesting birds to less than significant level.</p>	
Cultural Resources		
<p>Impact CUL-1: Construction activities on the Project site could potentially result in the disturbance of an archaeological resource pursuant to § 15064.5.</p>	<p><i>CUL-1 Treatment Plan</i></p> <p>If recommended by a qualified archaeologist pursuant to the Subsurface Cultural Resources Standard Permit Condition, the Project applicant shall prepare a treatment plan that reflects permit-level detail pertaining to depths and locations of excavation activities. The treatment plan shall be prepared and submitted to the Director of the City of San José Department of Planning, Building, and Code Enforcement or Director’s designee prior to approval of any grading permits. The treatment plan shall contain, at a minimum:</p>	<p>Less than Significant</p>

Significant Impacts	Mitigation Measures	Significance After Mitigation
	<ul style="list-style-type: none"> i. Identification of the scope of work and range of subsurface effects (including location map and development plan), including requirements for preliminary field investigations. ii. Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found). iii. Monitoring schedules and individuals iv. Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information). v. Detailed field strategy to record, recover, or avoid the finds and address research goals. vi. Analytical methods. vii. Report structure and outline of document contents. viii. Disposition of the artifacts. ix. Security approaches or protocols for finds. x. Appendices: all site records, correspondence, and consultation with Native Americans, etc. Implementation of the plan, by a qualified archaeologist, shall be required prior to the issuance of any grading permits. The treatment plan shall utilize data recovery methods to reduce impacts on subsurface resources. <p><i>CUL-2 Evaluation</i></p> <p>The Project applicant shall notify the Director of the City of San José Department of Planning, Building, and Code Enforcement or Director’s designee of any finds during the preliminary field investigation, grading,</p>	

Significant Impacts	Mitigation Measures	Significance After Mitigation
	<p>or other construction activities. Any historic or prehistoric material identified in the Project area during the preliminary field investigation and during excavation activities shall be evaluated for eligibility for listing in the California Register of Historic Resources as determined by the California Office of Historic Preservation. Data recovery methods may include, but are not limited to, backhoe trenching, shovel test units, hand augering, and hand-excavation. The techniques used for data recovery shall follow the protocols identified in the approved treatment plan. Data recovery shall include excavation and exposure of features, field documentation, and recordation. All documentation and recordation shall be submitted to the Northwest Information Center and Native American Heritage Commission (NAHC) Sacred Land Files, and/or equivalent prior to the issuance of an occupancy permit. A copy of the evaluation shall be submitted to the City of San José Department of Planning, Building, and Code Enforcement or Director’s designee.</p> <p>Implementation of the mitigations described above will reduce the impacts to archaeological resource resulting from construction activities at the site.</p>	
Hazards and Hazardous Materials		
<p>Impact HAZ-1: Project construction activities would disturb potentially volatile organic compound (VOC)-contaminated soils beneath building slabs within proposed APNs 244-15-026 and 244-15-003, which could result in impacts to construction workers and future site occupants from exposure to soil and/or soil</p>	<p><i>HAZ-1 Soil Vapor Considerations</i></p> <p>Prior to the issuance of grading permits, a site-specific Construction Health and Safety Plan shall be prepared by a qualified environmental professional and submitted to the City of San José Environmental Services Department. The Construction Health and Safety Plan shall include the following elements, as applicable:</p> <ul style="list-style-type: none"> ▪ Provisions for personal protection and monitoring exposure to construction workers, 	<p>Less than Significant</p>

Significant Impacts	Mitigation Measures	Significance After Mitigation
<p>vapor that is in exceedance of the Commercial/Industrial Environmental Screening Levels for VOCs.</p>	<ul style="list-style-type: none"> ▪ Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered, ▪ Procedures for the safe storage, stockpiling, and disposal of any contaminated soils, ▪ Emergency procedures and responsible personnel. <p>Prior to issuance of a building permit, the applicant shall conduct additional soil gas testing in the areas where VOC exceedances were detected to determine soil gas concentrations and shall submit this data to the City of San José Environmental Services Department for review. If the results of the soil gas testing reveal concentrations of VOCs above applicable regulatory environmental screening levels for an industrial use, applicant shall obtain regulatory oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, or the Santa Clara County Department of Environmental Health under their Site Cleanup Program.</p> <p>Implementation of the mitigations described above will reduce contaminant exposure impacts to construction workers and future site occupants from exposure to soil and/or soil vapor to a less than significant level through compliance with existing regulations.</p>	
Transportation		
<p>Impact TRANS-1: Project operations could exceed the City's industrial VMT per employee threshold of 14.37 by 0.45 VMT per employee and could conflict with CEQA</p>	<p><i>TRANS-1 Multimodal Transportation Infrastructure</i></p> <p>Prior to the issuance of building permits, the Project applicant shall prepare plans that illustrate the following measures to reduce the Project's VMT per employee by 1.17 VMT per employee, and shall</p>	<p>Less than Significant</p>

Significant Impacts	Mitigation Measures	Significance After Mitigation
Guidelines Section 15064.3, subdivision (b).	<p>coordinate with the Department of Transportation and the Department of Public Works to incorporate the following:</p> <ul style="list-style-type: none"> ▪ Construct an internal bicycle/pedestrian pathway connecting the cul-de-sacs at McKay Drive /Automation Parkway and Commerce Drive / Qume Drive. ▪ Shift existing curblines along the Commerce Drive and Qume Drive frontages 10 feet inwards to achieve a future 40-foot curb-to-curb width along both streets. <p>Final plans shall be submitted to and approved by the Department of Transportation and the Department of Public Works. Improvements shall be constructed prior to the issuance of the final occupancy permit.</p> <p>Implementation of the mitigations described above will reduce the VMT impacts from 14.82 to 13.65, which is below the VMT threshold of 14.37.</p>	

ES.3 Cumulative Impacts

The proposed Project would not result in significant and unavoidable cumulative impacts. Please see Section 4.0 for a complete analysis.

ES.4 Summary of Alternatives to the Proposed Project

CEQA requires that an EIR identify alternatives to the Project as proposed. The CEQA Guidelines specify that an EIR identify alternatives which “would feasibly attain most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects” of the Project. Below is a summary of the Project alternatives. A full analysis of the Project alternatives is provided in Section 8.0 of this Draft EIR, including additional alternatives that were considered and rejected from further consideration.

A. NO PROJECT ALTERNATIVE

The CEQA Guidelines [§15126(d)4] require that an EIR specifically discuss a “No Project” alternative, which shall address both “the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the Project is not approved, based on current plans and consistent with available infrastructure and community services.”

The No Project Alternative would not result in development on the Project site. If the Project site were to remain as is, there would be no new impacts.

B. RE-USE AND REDUCED DENSITY ALTERNATIVE

The Re-Use and Reduced Density Alternative considers adapting and reprogramming existing buildings on site for a warehouse/distribution project. Under this alternative, the Project would maintain existing building footprint and overall site layout. The Re-Use and Reduced Density Alternative would represent a 32-percent decrease in building area as compared to the proposed Project.

C. OTHER PERMITTED USE – MANUFACTURING ALTERNATIVE

The Manufacturing Alternative considers maintaining the same development footprint and site layout as the proposed Project, but programming proposed buildings for manufacturing uses. Manufacturing uses are a permitted land use under the IP General Plan designation and IP zoning. This alternative would include landscape improvements, updates to on site circulation and vehicle access, and upgraded utility connections, similar to the Project. The proposed buildings would be built to the latest state and City sustainability and green building standards to maximize energy efficiency and incorporate similar LID features to minimize environmental impacts on site.

D. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmentally superior alternative is the Re-Use and Reduced Density Alternative because it would further reduce the Project’s already less than significant effects to construction-period inadvertent discovery of previously unidentified cultural resources and construction-period disturbance, handling, and disposal of potentially hazardous soils and potentially reduce less than significant impacts to construction-period health risk effects from PM emissions, tree removal associated with site redevelopment,

construction-period disturbance of nesting birds, construction-period noise effects, and operational VMT increases, as compared to development under the proposed Project or other alternatives .

SECTION 1.0 INTRODUCTION

The City of San José (City), as the Lead Agency, has prepared this Draft Environmental Impact Report (Draft EIR) for the Qume and Commerce Project (Project) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed Project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this Project, the City is required to consider the information in the EIR along with any other available information in deciding whether to approve the Project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, cumulative impacts, alternatives, and growth-inducing impacts. It is not the intent of an EIR to recommend either approval or denial of a project.

1.1 Purpose and Intended Use of this EIR

This Draft EIR has been prepared to evaluate the environmental consequences that may result from implementation of the proposed Project. This Draft EIR provides an evaluation of the proposed Project at a project-level pursuant to the Guidelines for the California Environmental Quality Act (State CEQA Guidelines) (CCR Title 14, Chapter 3, Sections 15000-15387), Sections 15161 and 15168(a)(2), respectively. According to Section 15161 of the State CEQA Guidelines, a project-level EIR is appropriate for specific development projects for which information is available for all phases of the project, including planning, construction, and operation.

CEQA requires the Lead Agency to consider the information contained in the EIR prior to taking any discretionary action. This Draft EIR provides information to the Lead Agency and other public agencies, the general public, and decision makers regarding the potential environmental impacts from the construction and operation of the proposed Project. The purpose of the public review of the Draft EIR is to evaluate the adequacy of the environmental information in a transparent and publicly available setting. Section 15151 of the CEQA Guidelines states the following regarding standards by which adequacy is judged:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have not looked for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

Under CEQA, “The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the proposed project, and to indicate the manner in which those significant effects can be mitigated or avoided” (PRC Section 21002.1[a]). An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and

provides the information needed to assess the environmental consequences of a proposed project. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

As required by State CEQA Guidelines Section 15128, this Draft EIR must identify any effects of the Project determined to be significant. Section 3 of this Draft EIR identifies the subject matter that is the focus of analysis, and also identifies where certain environmental issues will have potential impacts from the Project.

1.2 EIR Process

NOTICE OF PREPARATION AND SCOPING

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City of San José prepared a Notice of Preparation (NOP) for this Draft EIR. The NOP was circulated to the public and responsible agencies for input for a 30-day comment period, from February 1, 2022 to March 3, 2022. The NOP provided a general description of the proposed Project and identified possible environmental impacts that could result from implementation of the Project. The City of San José also held a public scoping meeting on February 17, 2022 to discuss the Project and solicit public input as to the scope and contents of this Draft EIR.

Comments were received from nine individuals, organizations, and/or agencies, received as written comments via email. Additional comments were heard at the public scoping meeting. Concerns raised in response to the NOP and scoping meeting were considered during preparation of the Draft EIR and are addressed throughout the individual sections of this Draft EIR. The NOP and copies of all written comment letters received are provided in Appendix A of this Draft EIR.

In general, comments on the NOP expressed an interest to see the following issues addressed in the Draft EIR:

- Air Quality – air pollution and health risk impacts
- Biological Resources – tree removal and urban forest policies
- Tribal Cultural Resources – AB 52 compliance
- Transportation – local transportation analysis methodology
- Utilities and Service Systems – location of natural gas and electricity infrastructure

DRAFT EIR PUBLIC REVIEW AND COMMENT PERIOD

Publication of this Draft EIR will mark the beginning of a 45-day public review and comment period. During this period, the Draft EIR will be available to local, state, and federal agencies and to interested organizations and individuals for review and comment. Notice of the availability and completion of this Draft EIR will be sent directly to every agency, person, and organization that provided comment(s) on the NOP, as well as the Office of Planning and Research (OPR) per AB 819 ((Revised Pub. Resources Code, §§ 21080.4(a), 21082.1(c), 21091(a), 21092(b)(3), 21092.2(d), 21092.3, 21108(d), 21152(c), (d) and 21161.)).

Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

City of San José
Department of Planning, Building, & Code Enforcement
Cassandra van der Zweep, Environmental Project Manager
200 E. Santa Clara Street, Tower 3rd Floor
San José, CA 95113-1905
Cassandra.VanDerZweep@sanjoseca.gov

This Draft EIR and all documents referenced in it are available for public review in the Department of Planning, Building and Code Enforcement at San José City Hall, 200 E. Santa Clara Street, Tower 3rd floor, during normal business hours. Additionally, all materials will be made available at local libraries, including the Dr. Martin Luther King Jr. Library located at 150 E San Fernando Street. These documents are available for review online here:

<https://www.sanjoseca.gov/your-government/departments-offices/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/active-eirs/qume-and-commerce-project-h21-040>

FINAL EIR AND RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City of San José will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of the following: revisions to the Draft EIR text, as necessary; list of individuals and agencies commenting on the Draft EIR; responses to comments received on the Draft EIR, in accordance with CEQA Guidelines (Section 15088); and copies of letters received on the Draft EIR.

NOTICE OF DETERMINATION

If the Project is approved, the City of San José will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094(g)).

SECTION 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 Existing Project Site

The 32.80-acre Project site is located at 2222 and 2350 Qume Drive and 2150 Commerce Drive (APNs: 244-15-029, -030, and -003) in the City of San José.¹ See **Figure 2-1: Regional Map** and **Figure 2-2: Project Vicinity Map**. For the purpose of this analysis, the baseline conditions are that the Project site is developed with an industrial/business park complex containing three buildings totaling approximately 425,433 square-feet (sf); see **Figure 2-3: Existing Project Site**. Existing uses on site include research and development, industrial business park, and office.² Vehicular access to the Project site is currently provided via eight driveways on Qume Drive and Commerce Drive, and surface parking is available throughout the site. Truck access and loading docks are located on the northwestern extent of 2350 Qume Drive and the southwestern extent of 2150 Commerce Drive. **Table 2-1: Existing Building Summary** provides an overview of existing buildings.

Table 2-1: Existing Building Summary

Existing APN	Address	Building Area (sf)
244-15-029	2350 Qume Drive	289,915
244-15-030	2222 Qume Drive	79,685
244-15-003	2150 Commerce Drive	58,833

There is existing utility access (water, sewer, electricity, gas) to the Project site. The Project site has existing landscaping along all site boundaries and planters and landscaping strips throughout surface parking areas. There are 702 existing trees throughout the Project site, including 298 Ordinance-size trees.³ Finally, the Project site has existing site lighting for security and wayfinding.

2.2 Project Site Vicinity

The Project site is located in an urban area with a mix of surrounding uses including commercial, office, residential, and industrial uses. The Project site is bound by an industrial/business park to the north, McKay Drive and industrial uses to the south and southeast, the BART corridor to the east with residential uses beyond, and Qume Drive with a range of industrial and commercial uses to the west. Residential uses beyond the BART corridor are part of a different community than the Project site and do not share an immediate roadway network because they are separated by the fenced BART corridor.

Interstate 680 (I-680) and Interstate 880 (I-880) each run in a north-south orientation and are located approximately 0.51 mile east and 1.0-mile west, respectively, of the Project site at their nearest points. The nearest transit stop is the Lundy Avenue and Commerce Drive bus stop located approximately 0.14-mile west of the Project site.

¹ The County Assessor's Map was corrected in February 2022 to reflect changes from Lot Line Adjustment 19953160 recorded in 2008. The APNs identified hererin are effective starting July 2022, which is the start of the new assessor roll year.

² Per information provided by the Applicant, the existing use has approximately 1,150 employees.

³ An ordinance-size tree on private property is either: Single Trunk, 38-inches or more in circumference at 4 ½ feet above ground or Multi Trunk, the combined measurements of each trunk circumference, at 4 ½ feet above ground, add up to 38-inches or more in circumference.

2.3 Proposed Project

VESTING TENTATIVE MAP

The proposed Project includes approval of a Vesting Tentative Map (VTM) to divide APNs 244-15-029, -030, and -003 into four individual parcels, in order to provide each of the four proposed buildings with its own legal lot. **Figure 2-4: Proposed Vesting Tentative Map** depicts the proposed VTM and associated property lines. **Table 2-2: Proposed Parcel Summary** provides an overview of Project parcels.

Table 2-2: Proposed Parcel Summary

Proposed Project Parcel	Existing APN	Proposed APN	Proposed Acreage
1	244-15-029	244-15-026	15.18
2		244-15-028	9.43
3	244-15-030	244-15-020	4.48
4	244-15-003	244-15-003	3.77

PROPOSED DEVELOPMENT

The proposed Project would demolish all on site improvements and construct four new industrial warehouse/distribution buildings with dock doors and associated site improvements. The proposed buildings would comprise a total of approximately 714,491 sf with a net floor area ratio (FAR) of 0.51 and a maximum height of 48-feet. Each building would be single-story and include a mezzanine floor for ancillary office space. All buildings are proposed to operate 24 hours daily. Each building would include one backup emergency generator (four generators total). **Figure 2-5: Proposed Overall Site Plan** shows the site layout and **Figure 2-6A** through **Figure 2-D: Proposed Elevations** show the proposed architectural elevations.

The Project site is designated as Industrial Park (IP) by the General Plan, which allows for warehousing and distribution uses. The Project site is zoned as Industrial Park (IP). The IP Zoning District also allows for warehouse/distribution facilities.

Table 2-3: Proposed Building Summary provides an overview of proposed buildings and key components. Additionally, the proposed details of each building are outlined below.

Table 2-3: Proposed Building Summary

Building	Total Building Area (sf)	Warehouse Space (sf)	Office Space (sf)	Automobile Parking ¹	Trailer Parking	Dock Doors
1	358,180	353,180	5,000	156	61	39
2	202,735	197,735	5,000	150	27	21
3	83,751	78,751	5,000	53	4	10
4	69,825	84,825	5,000	53	7	10
Total	714,491	694,491	20,000	412	99	80
Notes						
¹ Total parking includes ADA accessible, clean air vehicle, EV stalls						
Source: Herdman Architecture + Design, February 2022.						

BUILDING 1

Building 1 would comprise approximately 358,180 sf including 353,180 sf of warehouse, 2,500 sf of office space in the southwest corner of the building, and 2,500 sf of office space on a mezzanine floor. Building 1 would include 39 loading dock doors for trucks on the south side of the building and 61 trailer parking stalls would be provided immediately south of the dock doors. On-site surface parking would include 133 standard automobile stalls along the northern and western site boundary, 8 Americans with Disabilities Act (ADA) accessible stalls, 8 clean air vehicle stalls, 8 electric vehicle (EV) stalls, and 8 motorcycle stalls along the southwest corner of the site near the office entrance on Qume Drive. Additionally, 12 bicycle parking stalls would be located near the office entrance. Vehicular access to Building 1 would be provided by two 32-foot wide driveways at Qume Drive. Truck access would be limited to the southerly driveway and would be controlled by a steel rolling gate. Additionally, a gated access road along the southeastern corner of the site would provide vehicular access from Building 2.

BUILDING 2

Building 2 would comprise approximately 202,735 sf including 197,735 sf of warehouse, 2,500 sf of office space in the southwest corner of the building, and 2,500 sf of office space on a mezzanine floor. Building 2 would include 21 dock doors for trucks on the south side of the building and 27 trailer parking stalls would be provided immediately south of the dock doors. On-site surface parking would include 126 standard automobile stalls to the north and west of the building and 8 ADA stalls, 8 clean air vehicle stalls, 8 EV stalls, and 5 motorcycle stalls along the southwest corner of the site near the office entrance on Qume Drive. Additionally, 8 bicycle parking stalls would be located near the office entrance. Vehicular access to Building 2 would be provided by two 32-foot wide driveways at Qume Drive. Truck access would be limited to the southerly driveway and would be controlled by a steel rolling gate. Additionally, Building 1 would be accessed by the gated access road to its northeast.

BUILDING 3

Building 3 would comprise approximately 83,751 sf including 81,251 sf of warehouse, 2,500 sf of office space in the northwest corner of the building, and 2,500 sf of office space on a mezzanine floor. Building 3 would include 10 dock doors for trucks on the south side of the building and 4 trailer parking spaces would be provided southwest of the dock doors. On-site surface parking would include 43 standard automobile stalls to the north and west of the building and 4 ADA stalls, 3 clean air vehicle stalls, 3 EV stalls, and 5 motorcycle stalls north of the building, near the office entrance. Additionally, 6 bicycle parking stalls would be located to the west of the office entrance, along Qume Drive. Vehicular access to Building 3 would be provided by three 32-foot wide driveways including two at Qume Drive and a gated driveway at McKay Drive. Truck access would be limited to the southerly driveway at Qume Drive and driveway at McKay Drive. Additionally, a Class I bikeway would be located southeast of Building 3, providing access between Commerce Drive and Automation Parkway.

BUILDING 4

Building 4 would comprise approximately 69,825 sf including 67,325 sf of warehouse, 2,500 sf of office space in the northwest corner of the building, and 2,500 sf of office space on a mezzanine floor. Building 4 would include 7 dock doors for trailer, box, and recycling trucks on the south side of the building and 7 trailer parking spaces would be provided south of the dock doors. On-site surface parking would include

43 standard automobile stalls to the east and west of the building and 4 ADA stalls, 3 clean air vehicle stalls, 3 EV stalls, and 3 motorcycle stalls west of the building, near the office entrance. Additionally, 6 bicycle parking stalls would be located next to the office entrance. Access to Building 4 would be provided by four 32-foot-wide driveways including two driveways at Commerce Drive and two driveways at McKay Drive. Truck access would be limited to the westerly driveway at Commerce Drive and southerly driveway at McKay Drive.

LANDSCAPE PLAN

The proposed landscaping plan and plant palette is provided as **Figure 2-7: Proposed Landscape Plan**. The Project site currently has mature landscape vegetation including trees and shrubs along the site boundary. Project implementation would remove existing vegetation, including 620 trees (598 on-site trees and 22 off-site trees), 297 of which are Ordinance-sized trees. 51 existing trees would remain. Tree removals would be in accordance with San José Municipal Code Section 13.32 which requires project applicants to obtain and comply with a Tree Removal Permit. Based on the City's Tree Replacement Ratios, the Project would require a total of 1,736 15-gallon replacement trees (or 868 24-inch box trees). The Project proposes to plant 339 new 24-inch box trees on-site and would pay in-lieu fees in accordance with the City's policy for the remaining 1,058 replacement trees. Additional landscaping throughout the site would include a mix of grasses, shrubs, and groundcover. Landscape coverage would be provided for the required 15-foot frontage setbacks along Qume Drive and Commerce Drive.

Overall, Project landscaping would cover approximately 21 percent (223,606 sf) of the Project site. The proposed landscape plan would meet the City of San José Water Efficient Landscape Requirements. Proposed features include a low flow irrigation system equipped with a weather based smart controller. On-site landscaping would meet State water efficient landscape standards and stage 2 drought restrictions. Final landscape plans would be subject to review during Development Plan Review to ensure compliance.

OFF-SITE IMPROVEMENTS

As required by the City, the proposed Project would shift the existing curblines along the Commerce Drive and Qume Drive Project frontages approximately 10 feet inwards to achieve a future 40-foot curb-to-curb width along Qume Drive and Commerce Drive. The purpose of the roadway narrowing is to control vehicle speed and provide for traffic calming, while also improving the pedestrian experience by providing wider sidewalks and improved landscape features. To facilitate bicycle connectivity within the Project vicinity, a Class I bikeway would be located along the southeastern portion of Building 3, providing access between Commerce Drive and Automation Parkway.

UTILITY INFRASTRUCTURE

Project implementation would require construction of on-site utility infrastructure to serve the proposed warehouse buildings. The Project would connect proposed utilities to existing off-site utility infrastructure in adjacent roadways, with the final sizing and design occurring during final building design and plan review.

Water and Sewer. The Project site is within the San José Water Company's jurisdictional boundaries. Although the Project site's existing use has connections to the utility system, the proposed Project would

provide new connections to the municipal water system. The City of San José's Environmental Services Department provides sewer utility services to the Project site, and wastewater treatment occurs at the San José-Santa Clara Regional Wastewater Facility (Facility). The Facility is jointly owned by the cities of San José and Santa Clara, and is managed by the City of San José's Environmental Services Department.

Stormwater Management. The City of San José's Environmental Services Department is responsible for stormwater management within the City. The Project proposed four (4) new connections to existing storm drain main lines along Qume Drive and Commerce Drive Project frontages and two storm drain lines connecting to the storm drain system via existing onsite connections at the corner of Commerce Drive and Qume Drive.

The proposed Project would incorporate on-site stormwater treatment features, through bioretention areas and flow-through planters. Stormwater on the northmost side of the property would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located north of Building 1. Stormwater between Buildings 1 and 2 would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located between Buildings 1 and 2. This 12-inch storm drain line would connect to the existing 24-inch public storm drain in Qume Drive, south of Concourse Drive. Stormwater south of Building 2 would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located between Buildings 2 and 3. Stormwater north of Building 3 would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located to the north of Building 3. Stormwater south of Building 3 would be captured in bioretention areas by catch basins and conveyed to 6 and 12-inch storm drain lines located south of Building 3. Stormwater east of Building 4 would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located to the east of Building 4. This 12-inch storm drain line would connect to an existing on-site storm drain catch basin located at the corner of Commerce Drive and Qume Drive. Stormwater west of Building 4 would be captured in bioretention areas by catch basins and conveyed to a 12-inch storm drain line located to the west of Building 4.

Dry Utilities and Solid Waste Management. San José Clean Energy (SJCE), the City's Community Energy department, provides electrical power to the Project site. The Project would enroll in SJCE's TotalGreen program, which provides 100 percent renewable energy to users. The proposed Project would connect to existing utility lines, with on-site facilities upgrades as required. Republic Services provides solid waste collection services and California Waste Solutions provides recycling services to the Project site. Project construction and demolition waste would be diverted to exceed City requirements and least 75 percent of construction and demolition waste and 100 percent of metal would be recycled. The Project would provide covered trash enclosures throughout the site.

PROJECT CONSTRUCTION

The Project would demolish existing on-site improvements, including three buildings totaling approximately 425,433 sf. The Project requires approximately 5,000 cubic yards of soil material to be exported from the Project site. The Project would be constructed over approximately 18 months, beginning in the second quarter of 2024. The Project would be constructed in one comprehensive phase and would follow a conventional construction sequence of demolition, site preparation,

grading/earthwork, paving, building construction, and architectural coating. Operations would be anticipated to commence in the fourth quarter of 2025.

The Project would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) under the National Pollution Discharge Elimination System (NPDES) General Construction Permit and the City's Municipal Code. The SWPPP would include best management practices (BMPs) to be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby bodies of water.

It is anticipated that construction would typically occur five days a week (Monday through Friday) from 7:00 AM to 7:00 PM, however the Site Development Permit includes a request for extended off-hour construction activities. These off-hour activities would include, but is not limited to, extending typical construction to Saturdays from 8:00 AM to 5:00 PM, and perform concrete pours during nighttime hours. The nighttime concrete pours would occur on up to 30 nights for Building 1, 25 nights for Building 2, 15 nights for Building 3, and 15 nights for Building 4. The nighttime concrete pours would utilize the following construction equipment: concrete mixer, concrete pump, concrete vibrator, generator, and air compressor.

Project design features (PDF) listed below include PDF NOI-1 construction noise measure, PDF NOI-2 extended construction hours, and PDF NOI-3 temporary wall barrier. PDF NOI-1 through PDF NOI-3 are proposed by the applicant to be implemented during construction to minimize construction noise effects and would be made conditions of approval for the Project.

Project Design Features

PDF NOI-1 Construction Noise Measure

Prior to Grading Permit issuance, the Applicant shall demonstrate, to the satisfaction of the City of San Jose Director of Public Works or City Engineer that the Project complies with the following:

- Prohibit pile driving.
- Prohibit unnecessary idling of internal combustion engines. Post signs at gates and other places where vehicles may congregate reminding operators of the State's Airborne Toxic Control Measure (ATCM) limiting idling to no more than 5 minutes.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the Project site.
- Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices.
- Property owners and occupants located within 300 feet of the Project boundary shall be sent a notice, at least 15 days prior to commencement of construction activities, regarding the construction schedule of the proposed Project. A sign, legible at 50 feet shall also be posted at the Project construction site. All notices and signs shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee, prior to mailing or posting

and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number for the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints.

- Prior to issuance of any Grading or Building Permit, the Contractor shall provide evidence that at all times during construction activities and on-site construction staff member will be designated as a Noise Disturbance Coordinator. The Noise Disturbance Coordinator is responsible for responding to complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall determine the cause (e.g., starting too early, bad muffler, etc.), implement reasonable measures to resolve the complaint, and document actions taken. All notices sent to residential units within 300 feet of the construction site and all signs posted at the construction site, shall include the contact name and the telephone number for the Noise Disturbance Coordinator.
- Construction haul routes shall be designed and clearly designated to avoid noise sensitive uses (e.g., residences, convalescent homes, etc.) to the extent feasible.

PDF NOI-2 Extended Construction Hours

San José requires approval of construction occurring outside of the hours of 7:00 AM to 7:00 PM, Monday through Friday and anytime on weekends, within 500 feet of existing residential land uses. The following measures would reduce noise impacts at nearby noise-sensitive receptors:

- Limit the active equipment during nighttime (10:00 PM to 7:00 AM) construction to the following construction equipment: concrete mixer, concrete pump, concrete vibrator, generator, and air compressor. Limit nighttime activity along the eastern boundary near sensitive receptors, as feasible.
- To the extent consistent with applicable regulations and safety considerations, operation of back-up beepers shall be avoided near sensitive receptors between 7:00 PM and 7:00 AM, and/or the work sites shall be arranged in a way that avoids the need for any reverse motions of trucks or the sounding of any reverse motion alarms during off hour work. If these measures are not feasible, equipment and trucks operating during off hours with reverse motion alarms must be outfitted with SAE J994 Class D alarms (ambient-adjusting, or “smart alarms” that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment).
- Residences or other noise-sensitive land uses within 500 feet of construction sites shall be notified of the anticipated construction schedule occurring between 7:00 PM and 7:00 AM and on weekends (“off hours construction”), in writing, at least 15 days prior to the beginning of off hours construction. This notification shall specify the anticipated dates for all off hour construction and provide the contact information for the Noise Disturbance Coordinator.
- Designate a Noise Disturbance Coordinator that would be responsible for responding to any local complaints including about off hour construction noise within 48 hours. Any nuisance complaint reported during nighttime operations (7:00 PM and 7:00 AM) shall be deemed an urgent issue and shall be responded to immediately. The Coordinator would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to

correct the problem. Conspicuously post a telephone number for the Coordinator at the construction site.

PDF NOI-3 Temporary Noise Barrier

Prior to the issuance of any demolition or grading permit that covers work within 500 feet of residences, the Applicant shall demonstrate to the Director of Planning Building and Code Enforcement or Director's Designee that the temporary construction noise barriers will be installed meeting the following requirements:

Prior to any construction activities within 500 feet of residences, a temporary noise barrier shall be erected along a portion of the Project boundary within 500 feet of residences (**see Figure 2-8: Temporary Noise Barrier Location** of the Draft EIR). The temporary noise barrier shall be 350 linear feet along the northern property boundary where it intersects with the eastern boundary; along the entire length (400 linear feet) of the eastern boundary; and 400 linear feet of the southeastern boundary. The temporary noise barrier shall be a minimum of 10 feet high. The temporary noise barrier shall remain in place from the demolition through vertical shell construction, not including paving, landscaping, glazing installations, roofing, and architectural coating (exterior and interior) and finishes.

The temporary noise barrier shall have a sound transmission class (STC) of 25 or greater in accordance with the American Society for Testing and Materials (ASTM) Test Method E90. As an example, one method to achieve this would be a barrier consisting of steel tubular framing, welded joints, a layer of 18-ounce tarp, a two-inch thick fiberglass blanket, a half-inch thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. Additionally, to avoid objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with ASTM Test Method C423.

2.4 Project Objectives

Pursuant to CEQA Guidelines Section 15124, an EIR must identify the objectives sought by the proposed Project. The objectives of the Project are to:

1. Positively contribute to the economy of the region through new capital investment, creation of new employment opportunities, and revitalization of an existing developed site.
2. Improve economic vitality of the Project site by creating a modern distribution warehouse capable of attracting Class A tenants.
3. Maximize development of Class A speculative industrial warehouse buildings in the City of San José that are designed to meet contemporary industry standards for operational design criteria, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.

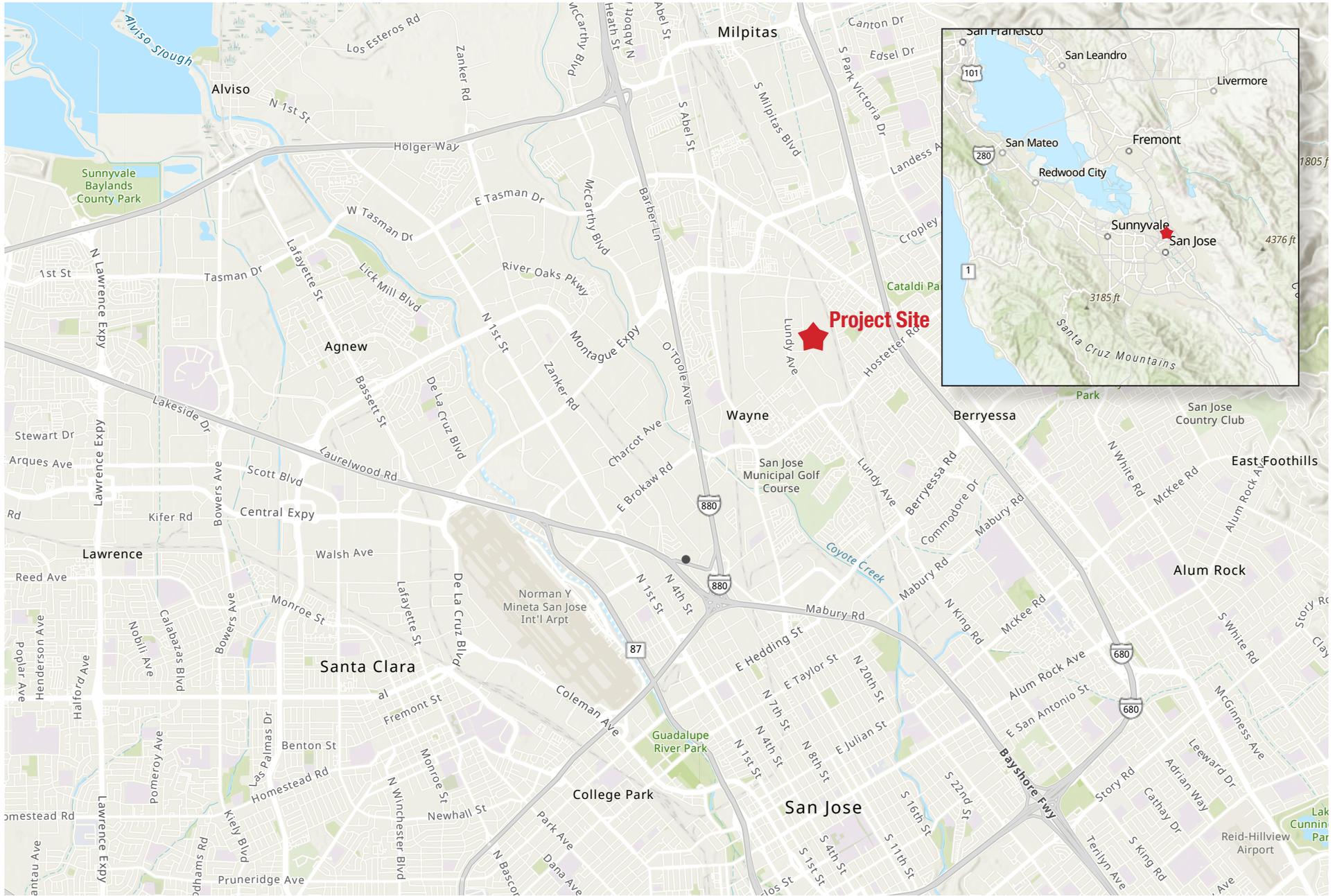
4. Seek opportunities through site design, engineering, “green” building strategies, Low Impact Development (LID), and on-going management practices to minimize environmental impacts on the local and regional environment.
5. Develop buildings that meet new state and City sustainability and green building standards and reduce use of non-renewable energy for building operations.
6. Maximize industrial warehouse buildings in close proximity to an already-established industrial area, designated truck routes, and the State highway system in order to avoid or shorten truck-trip lengths and commutes on other roadways.
7. Encourage development of industrial areas and redevelopment of existing older or marginal industrial areas (e.g., areas which could support intensified operational activity), particularly in locations that facilitate efficient commute patterns.
8. Develop buildings with an overall design that will provide a distinctive image for corporate users, and generous setbacks with thoughtfully designed landscaping.
9. Provide safe, efficient, and accessible multi-modal transportation opportunities within the Project area to support businesses and increase pedestrian activity.

2.5 Use of this EIR

This Draft EIR is intended to provide the City of San José, other public agencies, and member of the public with the relevant environmental information needed in considering the proposed Project.

The City of San José anticipates that approvals by the City, including but not limited to the following, will be required to implement the Project addressed in this Draft EIR:

1. Site Development Permit, including extended construction hours
2. Vesting Tentative Map
3. Demolition Permit
4. Tree Removal Permit
5. Public Works Clearances including grading permits

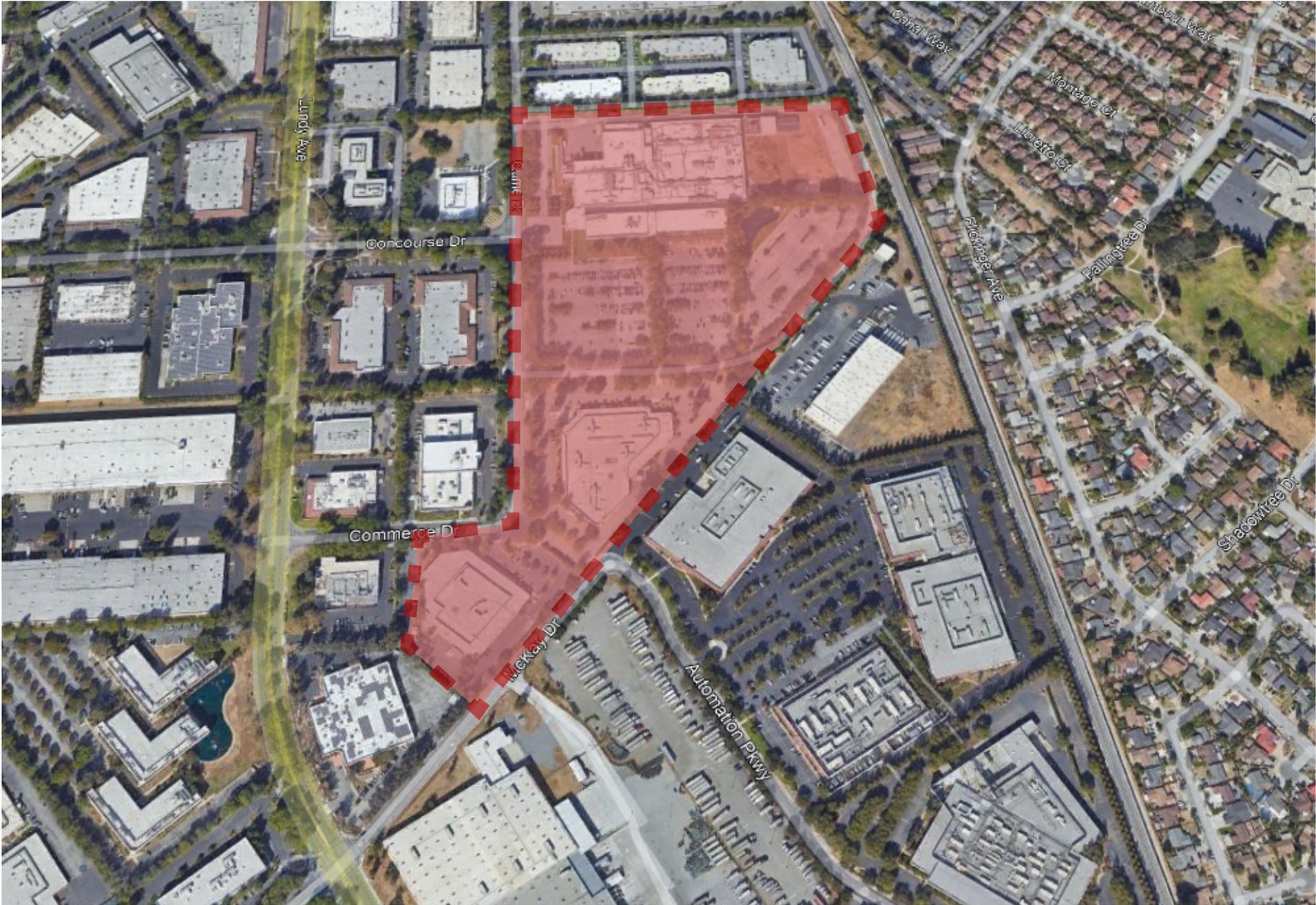


Source: USGS, 2022

Figure 2-1: Regional Location Map



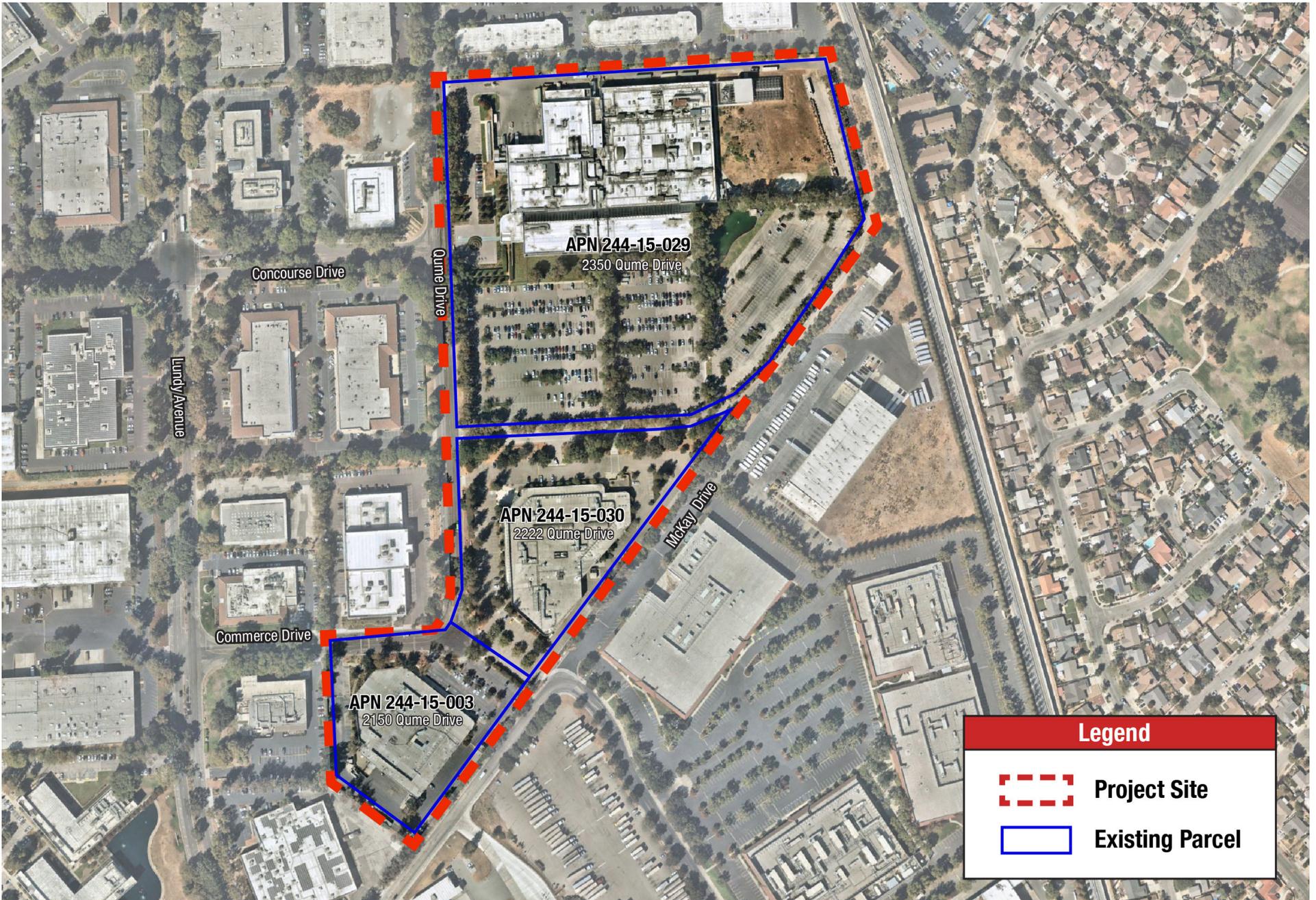
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Source: Google Earth, 2022

Figure 2-2: Project Vicinity Map



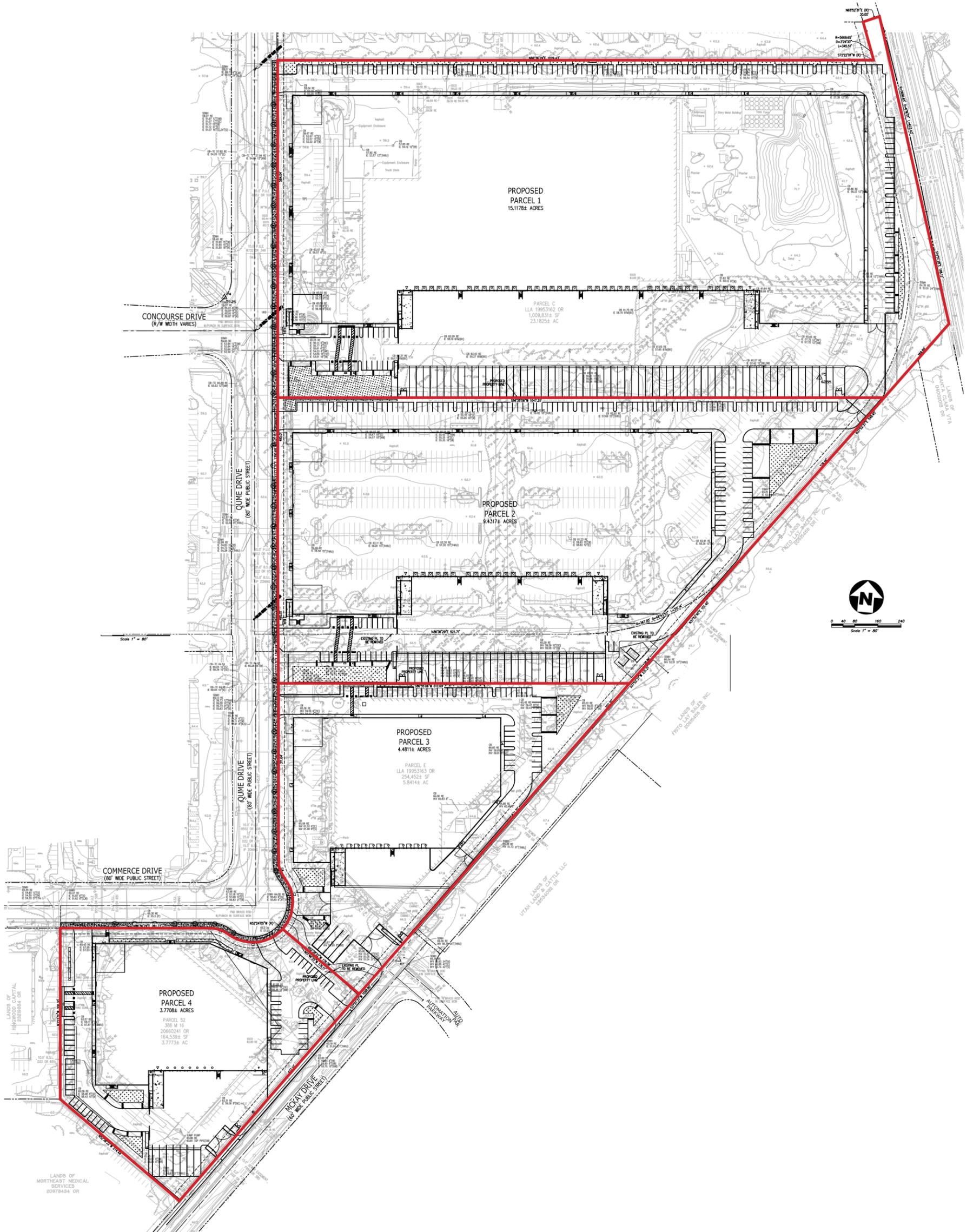


Source: Google Earth, 2022

Figure 2-3: Existing Project Site



Not to scale



Source: KERT + WRIGHT, 2022

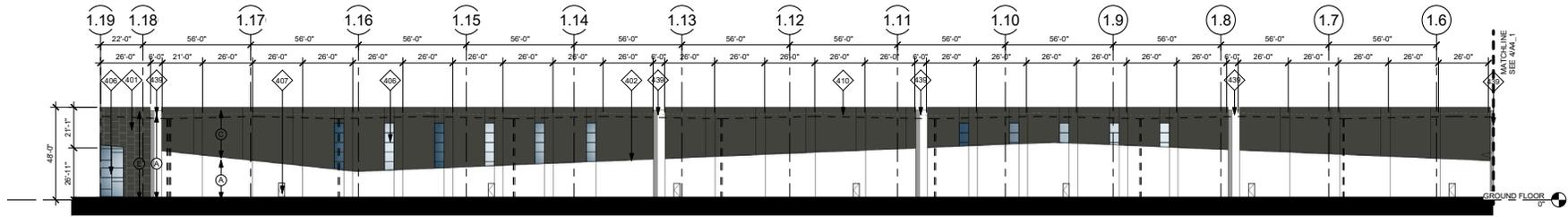
Figure 2-4: Proposed Vesting Tentative Map

Qume and Commerce Project
Draft EIR

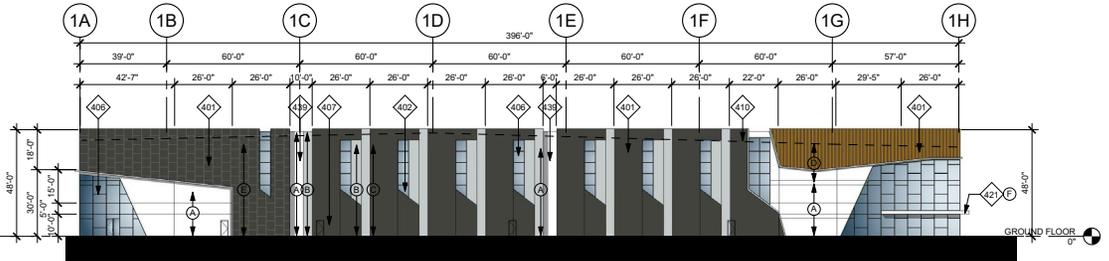
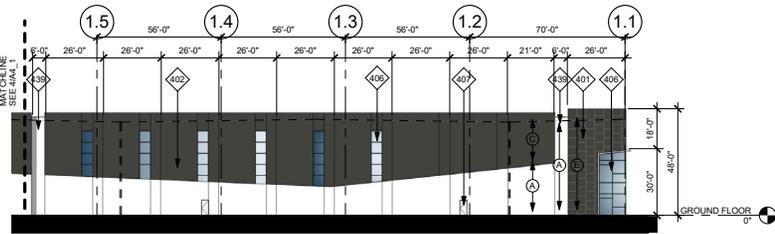


Source: Herdman, 2022

Figure 2-5: Proposed Overall Site Plan
 Qume and Commerce Project
 Draft EIR

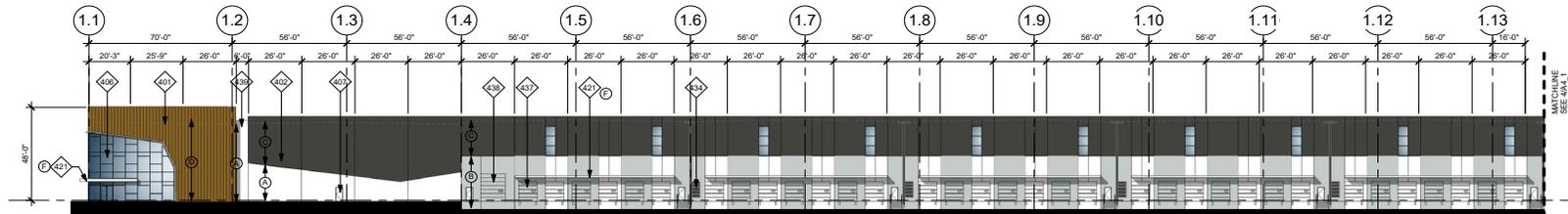


1 PROPOSED NORTH ELEVATION - BUILDING 1
1" = 30'-0"



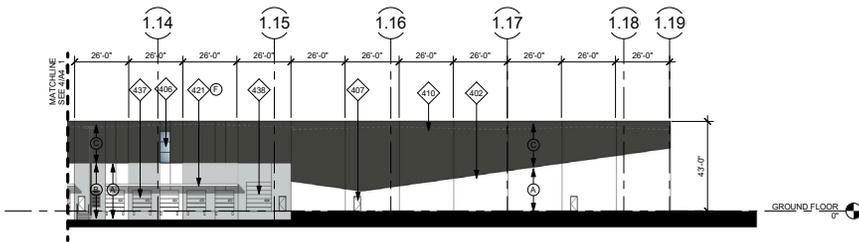
3 PROPOSED WEST ELEVATION - BUILDING 1
1" = 30'-0"

2 PROPOSED NORTH ELEVATION - BUILDING 1 - CONT.
1" = 30'-0"

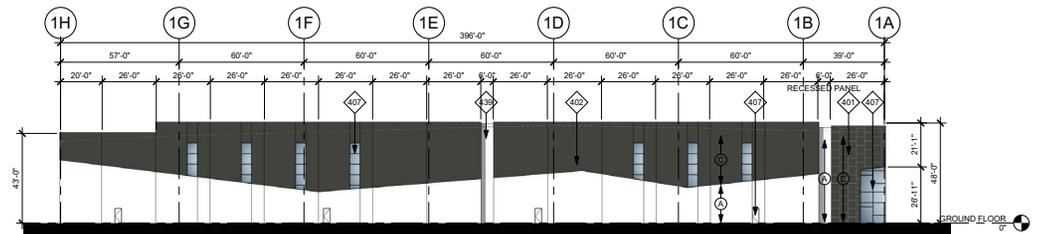


4 PROPOSED SOUTH ELEVATION - BUILDING 1
1" = 30'-0"

7 RECESSED PANEL DETAIL, TYP.
1" = 2'-0"



5 PROPOSED SOUTH ELEVATION - BUILDING 1 - CONT.
1" = 30'-0"

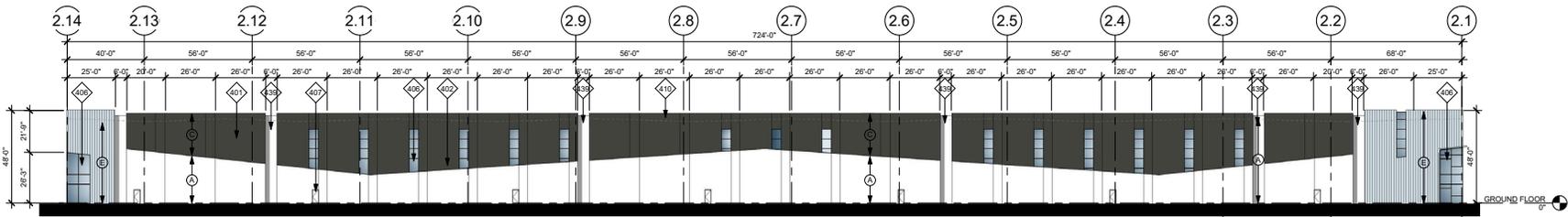


6 PROPOSED EAST ELEVATION - BUILDING 1
1" = 30'-0"

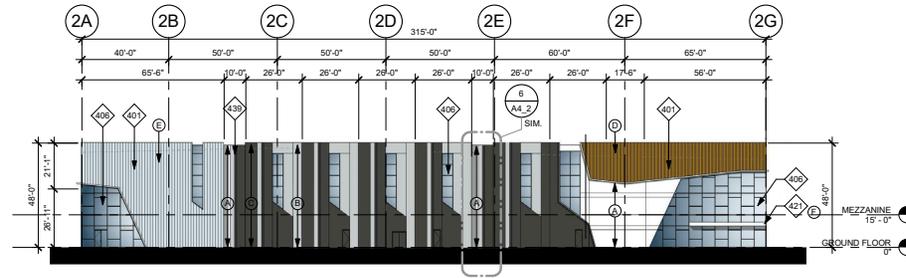
Source: Herdman, 2022

Figure 2-6A: Proposed Elevations
Qume and Commerce Project
Draft EIR

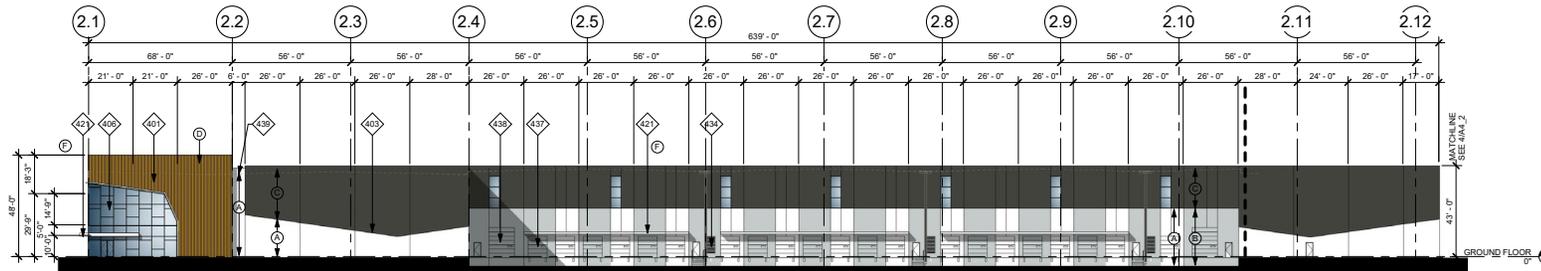
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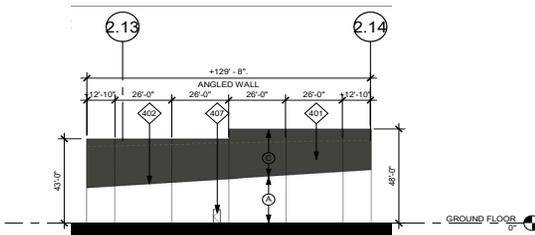
1 PROPOSED NORTH ELEVATION - BUILDING 2
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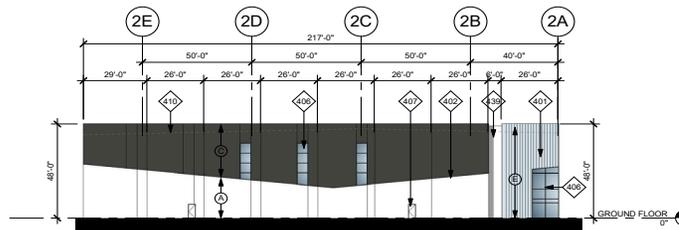
2 PROPOSED WEST ELEVATION - BUILDING 2
1" = 30'-0"



3 PROPOSED SOUTH ELEVATION - BUILDING 2
1" = 30'-0"



4 PROPOSED SOUTHEAST ELEVATION - BUILDING 2
1" = 30'-0"



5 PROPOSED EAST ELEVATION - BUILDING 2
1" = 30'-0"

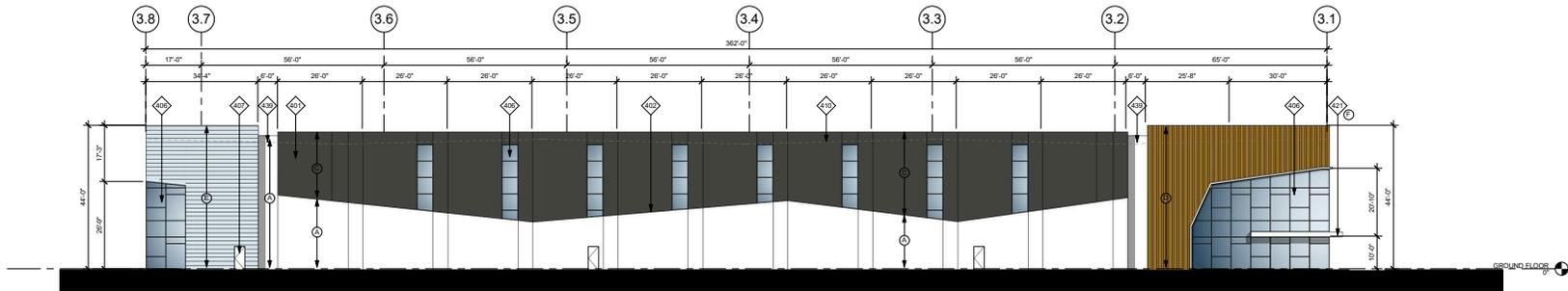


6 RECESSED PANEL DETAIL, TYP.
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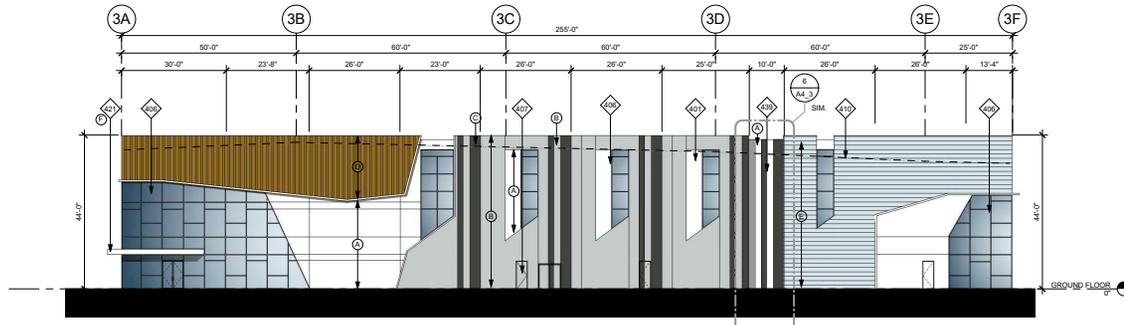
Source: Herdman, 2022

Figure 2-6B: Proposed Elevations
Qume and Commerce Project
Draft EIR

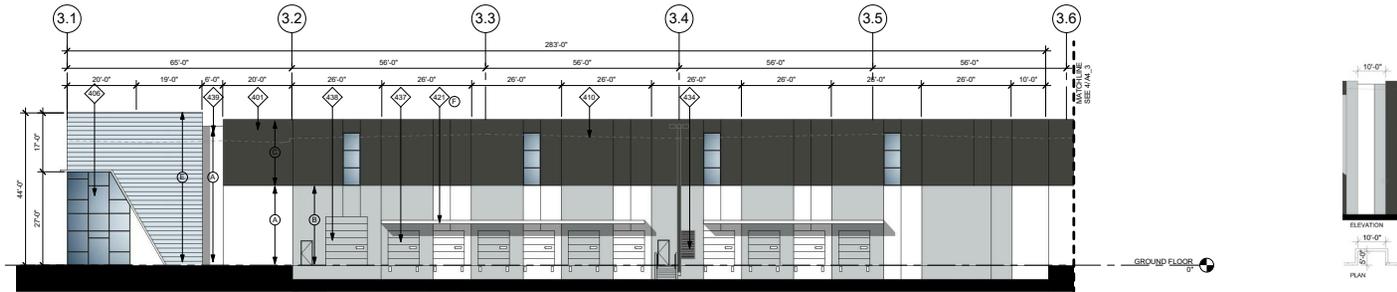
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PROPOSED NORTH ELEVATION - BUILDING 3

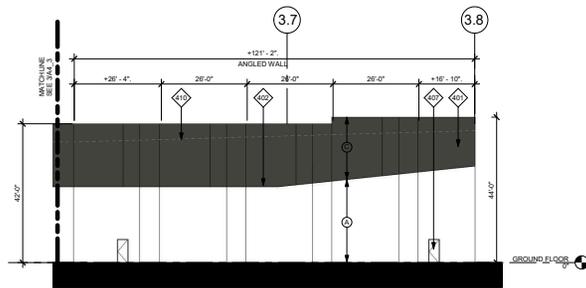


PROPOSED WEST ELEVATION - BUILDING 3

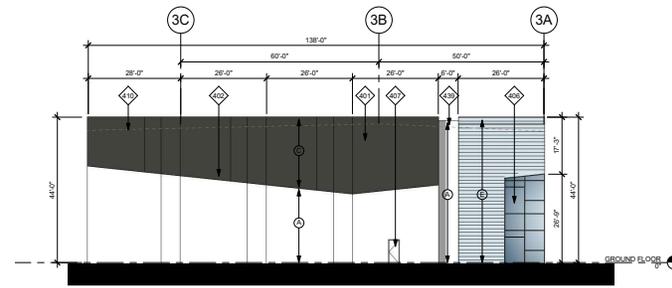


PROPOSED SOUTH ELEVATION - BUILDING 3

RECESSED PANEL DETAIL, TYP.



PROPOSED SOUTHEAST ELEVATION - BUILDING 3

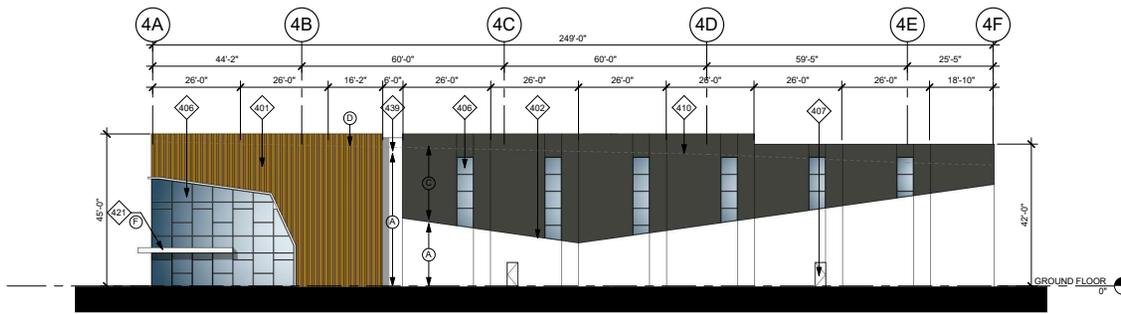


PROPOSED EAST ELEVATION - BUILDING 3

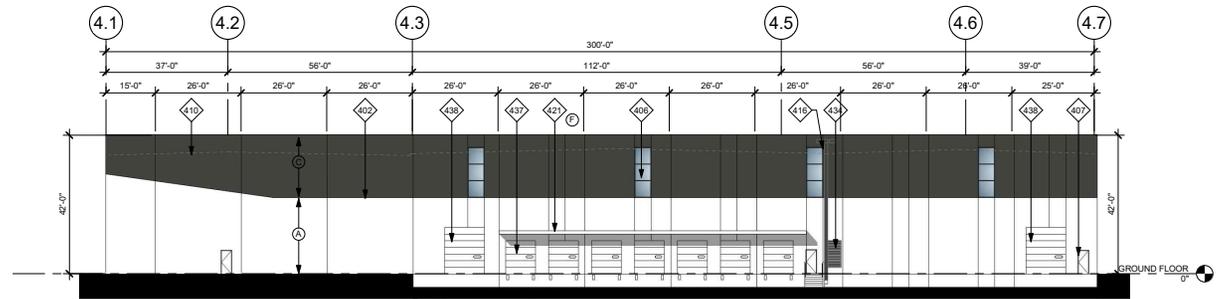
Source: Herdman, 2022

Figure 2-6C: Proposed Elevations
Qume and Commerce Project
Draft EIR

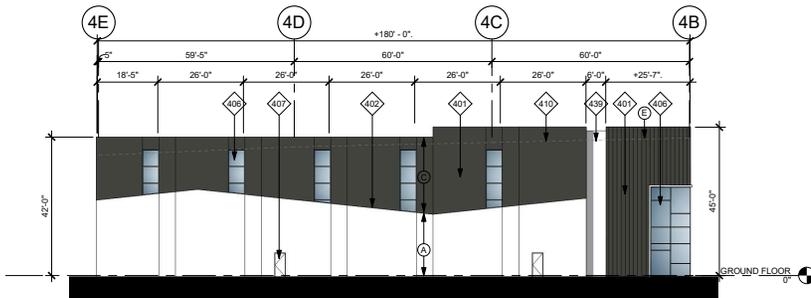
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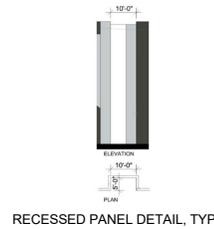
PROPOSED WEST ELEVATION-BUILDING 4



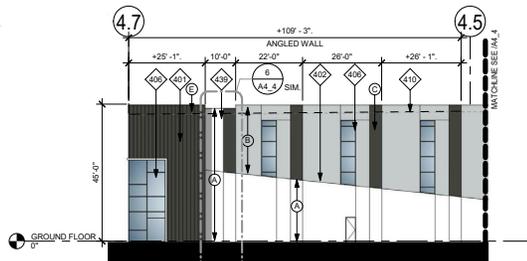
PROPOSED SOUTH ELEVATION - BUILDING 4



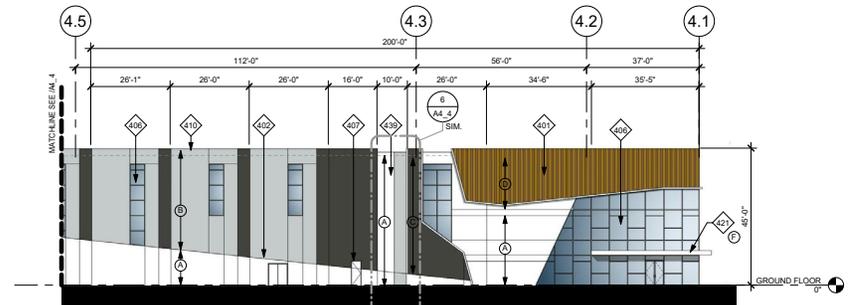
PROPOSED EAST ELEVATION - BUILDING 4



RECESSED PANEL DETAIL, TYP.



PROPOSED NORTHEAST ELEVATION - BUILDING 4



PROPOSED NORTH ELEVATION - BUILDING 4

Source: Herdman, 2022

Figure 2-6D: Proposed Elevations
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Draft EIR

Not to scale



PRELIMINARY PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME
TREES		
	ARBUTUS 'MARINI'	MARINA STRAWBERRY TREE
	CERCIS OCCIDENTALIS	WESTERN REDBUD
	LAGERSTROEMIA 'PECCOS'	PECCOS CRAPE MYRTLE
	OLEA EUROPAEA 'MONKIE'	MAJESTIC BEAUTY OLIVE
	METROSIDEROS EXCELSA	NEW ZEALAND CHRISTMAS TREE
	PISTACIA CHINENSIS	CHINESE PISTACHE
	PLATANUS X HISPANICA 'YARWOOD'	'YARWOOD' PLANE TREE
	QUERCUS DOUGLASSII	BLUE OAK
	QUERCUS MUEHLBERGII	CHINQUAPIN OAK
SHRUBS & PERENNIALS		
LARGE SHRUBS		
	ABUOTAPHYLLOS 'HOWARD MAMINI'	MANZANITA
	ERIODONUM FASCICULATUM 'WARRINER LITTLE'	WARRINER LITTLE BUCKWHEAT
	GREVILLEA X 'NOELLI'	NOELL'S GREVILLEA
	RIBES VIBURNIFOLIUM	EVERGREEN CURRANT
	METROSTILES ARBUTIFOLIA 'DAHS GOLD'	GOLD TOYON
	LAWATERA MARTINA	TREE MALLOW
	RHAMNUS CALIFORNICA	COFFEEBERRY
MEDIUM-SMALL SHRUBS		
	ANDROSANTOS 'BUSH BRIDGE'	MANZANITA
	DEDES BRIDGE 'JOHN'S RUNNER'	FORTNIGHT LILY
	ERIODONUM GRANDE RUBESCENS	RED BUCKWHEAT
	MARLENEA RIGENS	SUPERB GREVILLEA
	HANDERA DOMESTICA 'MONKIE'	DEER GRASS
	SALVIA LEUCOPHYLLA	HEAVENLY BANGOOD
		PURPLE SAGE
GROUNDCOVERS		
	ACACIA REDDLENS 'DESERT CARPET'	PROSTRATE ACACIA
	ADEWANTHOS CUNEATUS 'CORAL DRIFT'	FLAME BUSH
	SACCHARIS PULILLARIS 'PIGEON POINT'	DMARF COYOTE BRUSH
	CEANDORUS GRISSEUS HORIZONTALIS 'YANKEE POINT'	YANKEE POINT COYOTE BRUSH
	COPROSMA PETRE 'VERDE VISA'	CREeping COPROSMA
	VERBENA PERUVIANA	PERUVIAN VERBENA
STORMWATER		
	CALLISTEMON VIMINALIS 'LITTLE JOHN'	DMARF BOTTLEBRUSH
	SAREX SWILLA (BANK, BANKS, UPLAND)	Berkeley Sedge
	CHONDROPETALUM TECTORUM (BANK, BANKS, UPLAND)	Small Cape Rush
	ANJUS FRAZES (BANK, BANKS, UPLAND)	California Grey Rush
	MAHONIA AQUIFOLIUM 'COMPACTA' (BANKS, UPLAND)	Oregon Grape
	MUEHLBERGIA RIGENS (BANKS, UPLAND)	Deer Grass
	RHAMNUS CALIFORNICA 'LITTLE SUR' (UPLAND)	LITTLE SUR COFFEEBERRY
CA NATIVE HYDROSEED MIX		
	CALIFORNIA COASTAL WILDFLOWER MIX	PACIFIC COAST SEED
	NATIVE ORNAMENTAL FIRE FESCUE MIX	PACIFIC COAST SEED

*FOR FULL PLANT SCHEDULE, SEE SHEET L1.02

TOTAL LANDSCAPE AREA THAT IS BEING UTILIZED AS STORMWATER CONTROL MEASURES: 51.3%

Source: Jett Landscape Architecture, 2022

Figure 2-7: Proposed Landscape Plan

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Source: Google Earth, 2022

Figure 2-8: Temporary Noise Barrier Location



Not to scale

SECTION 3.0 ENVIRONMENTAL ANALYSIS

The analysis contained in this Draft EIR evaluates the potential effects of the proposed Project. An Initial Study (Appendix B) was prepared and found that the Project would have no impact or a less than significant impact on the following resources: Aesthetics, Agriculture and Forestry Resources, Energy, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. This Draft EIR focuses on the potentially significant impacts to Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise and Vibration, and Transportation. Sections 3.1 through 3.7 of this Draft EIR are structured as follows:

ENVIRONMENTAL SETTING

This subsection describes the existing physical environmental conditions at the Project site and in the surrounding area, as relevant.

REGULATORY FRAMEWORK

This subsection provides a brief overview of relevant plans, policies, and regulations that comprise the regulatory framework for the Project.

IMPACT ANALYSIS

This subsection:

- 1) includes thresholds of significance for determining impacts,
- 2) discusses the Project's consistency with those thresholds, and
- 3) discusses the Project's consistency with applicable plans. For any identified potentially significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact AQ-1** would denote the first impact discussed in the Air Quality section. Mitigation measures are numbered to correspond to the order they appear. For example, **Mitigation Measure AQ-1** would refer to the first mitigation measure introduced in the Air Quality section.

The Project's consistency with applicable plans (such as general plans, specific plans, and regional plans) is also discussed within this subsection pursuant to CEQA Guidelines Section 15125(d).

IMPORTANT NOTE TO THE READER

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of San José currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed Project, which are also addressed in the Regulatory Framework and Impact Analysis sections. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an “environmental impact” as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the Project on the environment, the Impact Analysis sections will discuss issues that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a high noise environment, or on/adjacent to sites involving hazardous substances.

Separately, it should be noted that the following analysis considers the Project’s potential impacts with respect to biological resources, cultural resources, and hazards and hazardous materials. All of these analyses focus on the direct and indirect impacts on physical resources.

3.1 AIR QUALITY

An Air Quality Assessment and Health Risk Assessment were prepared by Kimley-Horn, Inc. (June 2022) to address potential impacts to Air Quality associated with implementation of the proposed Project. The following discussion is based on the Air Quality and Health Risk Assessments, which are included as Appendix C and D of this Draft EIR.

ENVIRONMENTAL SETTING

The City of San José is located in the Santa Clara Valley within the San Francisco Bay Area Air Basin (“the Basin”). The Project area’s proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. This portion of the Santa Clara Valley is bounded to the north by the San Francisco Bay and the Santa Cruz Mountains to the southwest and the Diablo Range to the east. The surrounding terrain greatly influences winds in the valley, resulting in a prevailing wind that follows along the valley’s northwest-southwest axis.

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

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive receptors in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project site is located in an urban area with a mix of uses surrounding the site including commercial, office, and industrial uses. The proposed Project’s existing land use designation is Industrial Park (IP) and existing zoning district is Industrial Park (IP). **Table 3.1-1** lists the distances and locations of the nearest sensitive receptors within 1,000 feet of the Project site per BAAQMD guidance. **Figure 3.1-1: Sensitive Receptor Location Map.**

Table 3.1-1: Nearest Sensitive Receptors to Project Site

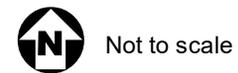
Sensitive Receptor Description	Distance and Direction from the Project Site ¹
Multi-family residential community	140 feet east
Single-family residential community	190 feet east
Brooktree Park	770 feet southeast
Brooktree Elementary School	900 feet southeast

¹. Distance measured from Project property line to sensitive receptor property line.



Source: Google Earth, 2022

Figure 3.1-1: Sensitive Receptor Location Map
 Qume and Commerce Project
 Draft EIR



REGULATORY FRAMEWORK

FEDERAL AND STATE

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the EPA developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. Depending on whether the standards are met or exceeded, the local air basin is classified as in “attainment” or “nonattainment.” Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires that each state prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. Environmental Protection Agency (EPA) has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in **Table 3.1-2: State and Federal Ambient Air Quality Standards**.

California Air Resources Board

CARB administers California’s air quality policy. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 3.1-2**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. In general, the Bay Area experiences low concentrations of most pollutants when compared to federal standards, except for O₃ and PM, for which standards are exceeded periodically. With respect to federal standards, the Bay Area’s attainment status for 8-hour ozone is classified as “marginal nonattainment” and “nonattainment” for PM_{2.5}. The region is also considered to be in nonattainment with the CAAQS for PM₁₀ and PM_{2.5}. Area sources generate the majority of these airborne particulate emissions. The Basin is considered in attainment or unclassified with respect to the CO, NO₂ and SO₂ NAAQS and CAAQS.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 3.1-2**.

Table 3.1-2: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards ¹		Federal Standards ²	
		Concentration	Attainment Status	Concentration ³	Attainment Status
Ozone (O ₃)	8 Hour	0.070 ppm (137 µg/m ³)	N ⁹	0.070 ppm	N ⁴
	1 Hour	0.09 ppm (180 µg/m ³)	N	NA	N/A ⁵
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	A	9 ppm (10 mg/m ³)	A ⁶
	1 Hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	A
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	A	0.100 ppm ¹¹	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	-	0.053 ppm (100 µg/m ³)	A
Sulfur Dioxide ¹² (SO ₂)	24 Hour	0.04 ppm (105 µg/m ³)	A	0.14 ppm (365 µg/m ³)	A
	1 Hour	0.25 ppm (655 µg/m ³)	A	0.075 ppm (196 µg/m ³)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m ³)	A
Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	N	150 µg/m ³	-U
	Annual Arithmetic Mean	20 µg/m ³	N ⁷	NA	-
Fine Particulate Matter (PM _{2.5}) ¹⁵	24-Hour	NA	-	35 µg/m ³	U/A
	Annual Arithmetic Mean	12 µg/m ³	N ⁷	12 µg/m ³	N
Sulfates (SO ₄₋₂)	24 Hour	25 µg/m ³	A	NA	-
Lead (Pb) ^{13, 14}	30-Day Average	1.5 µg/m ³	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m ³	A
	Rolling 3-Month Average	NA	-	0.15 µg/m ³	-
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (42 µg/m ³)	U	NA	-
Vinyl Chloride (C ₂ H ₃ Cl)	24 Hour	0.01 ppm (26 µg/m ³)	-	NA	-
Visibility Reducing Particles ⁸	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; - = not indicated or no information available.

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM₁₀, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equal or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
- National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
- National air quality standards are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.
- On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017.

Pollutant	Averaging Time	State Standards ¹		Federal Standards ²	
		Concentration	Attainment Status	Concentration ³	Attainment Status
<p>Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.</p> <ol style="list-style-type: none"> 5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005. 6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard. 7. In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀. 8. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range. 9. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006. 10. On January 9, 2013, EPA issued a final rule to determine that the Bay Area attains the 24-hour PM_{2.5} national standard. This EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this EPA action, the Bay Area will continue to be designated as “nonattainment” for the national 24-hour PM_{2.5} standard until such time as the Air District submits a “redesignation request” and a “maintenance plan” to EPA, and EPA approves the proposed redesignation. 11. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010). The US Environmental Protection Agency (EPA) expects to make a designation for the Bay Area by the end of 2017. 12. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO₂ NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO₂ NAAQS. 13. CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure below which there are no adverse health effects determined. 14. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011. 15. In December 2012, EPA strengthened the annual PM_{2.5} National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter (µg/m³). In December 2014, EPA issued final area designations for the 2012 primary annual PM_{2.5} NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015. <p>Source: Bay Area Air Quality Management District, <i>Air Quality Standards and Attainment Status</i>, 2017 http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.</p>					

REGIONAL

Bay Area Air Quality Management District

The BAAQMD is the regional agency with jurisdiction over the nine-county region located in the Basin. The Association of Bay Area Governments (ABAG), Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various nongovernmental organizations also join in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM₁₀ standard). The BAAQMD is responsible for developing a Clean Air Plan, which guides the region’s air quality planning efforts to attain the CAAQS. The BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate on April 19, 2019, by the BAAQMD.

BAAQMD periodically develops air quality plans that outline the regional strategy to improve air quality and protect the climate. The most recent plan, 2017 Bay Area Clean Air Plan (Clean Air Plan), includes a wide range of control measures designed to reduce emissions of air pollutants and GHGs, including the

following examples that may be relevant to this Project: reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks; implement pricing measures to reduce travel demand; accelerate the widespread adoption of electric vehicles; promote the use of clean fuels; promote energy efficiency in both new and existing buildings; and promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAQMD will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The Clean Air Plan contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_x), particulate matter, TACs, and greenhouse gas emissions. The Bay Area 2017 Clean Air Plan updates the Bay Area 2010 Clean Air Plan in accordance with the requirements of the California Clean Air Act to implement “all feasible measures” to reduce ozone; provides a control strategy to reduce ozone, PM, TACs, and greenhouse gases in a single, integrated plan; reviews progress in improving air quality in recent years; and establishes emission control measures to be adopted or implemented in both the short term and through 2050.

The Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The following BAAQMD rules would limit emissions of air pollutants from construction and operation of the Project:

- Regulation 8, Rule 3 – Architectural Coatings. This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases content in paints and paint solvents. Although this rule does not directly apply to the Project, it does dictate the ROG content of paint available for use during the construction.
- Regulation 8, Rule 15 – Emulsified and Liquid Asphalts. This rule dictates the reactive organic gases content of asphalt available for use during construction through regulating the sale and use of asphalt and limits the ROG content in asphalt. Although this rule does not directly apply to the Project, it does dictate the ROG content of asphalt for use during the construction.
- Regulation 9, Rule 8 – Organic Compounds. This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower.

BAAQMD prepared an Ozone Attainment Demonstration Plan to satisfy the federal 1-hour ozone planning requirement because of the Air Basin’s nonattainment for federal and State ozone standards. The U.S. EPA revoked the 1-hour ozone standard and adopted an 8-hour ozone standard. The BAAQMD will address the new federal 8-hour ozone planning requirements once they are established.

Construction TAC and PM_{2.5} Health Risks

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors.

Under the BAAQMD Air Quality Guidelines (as shown in Appendix A), an incremental cancer risk of greater than 10 cases per million for a 70-year exposure duration at the Maximally Exposed Individual or MEI will result in a significant impact. The 10 in 1 million threshold is based on the latest scientific data and is designed to protect the most sensitive individuals in the population as each chemical's exposure level includes large margins of safety. In addition to this carcinogen threshold, OEHHA recommends that the non-carcinogenic hazards for TACs at ground level should not exceed a chronic hazard index of greater than one.

LOCAL

City of San José General Plan

The City's General Plan includes the following air quality policies applicable to the Project:

- Policy MS-10.1: Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement air emissions reduction measures.
- Policy MS-10.2: Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.
- Policy MS-10.4: Encourage effective regulation of mobile and stationary sources of air pollution, both inside and outside of San José. In particular, support Federal and State regulations to improve automobile emission controls.
- Policy MS – 10.6: Encourage mixed land use development near transit lines and provide retail and other types of service-oriented uses within walking distance to minimize automobile dependent development.
- Policy MS – 10.7: Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.
- Policy MS-11.2: For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as,

but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

- Policy MS-11.6: Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of toxic air contaminants (TACs) and particulate matter smaller than 2.5 microns (PM_{2.5}), emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.
- Policy MS-11.7: Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.
- Policy MS-11.8: For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.
- Policy MS-12.2: Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing and potential sources of odor. An adequate separation distance will be determined based upon the type, size and operations of the facility
- Policy MS-13.1: Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.
- Policy MS-13.3: Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, an air quality impact is considered significant if the Project would:

1. Conflict with or obstruct implementation of the applicable air quality plan?
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
3. Expose sensitive receptors to substantial pollutant concentrations?

-
4. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)
-

AQ-1 ***Would the Project conflict with or obstruct implementation of the applicable air quality plan?***
Less Than Significant Impact

BAAQMD’s most recently adopted plan, the Clean Air Plan, outlines how the San Francisco Bay Area will attain air quality standards, reduce population exposure and protect public health, and reduce GHG emissions.

The Clean Air Plan assumptions for projected air emissions and pollutants in the City of San José are based on the Envision San José 2040 General Plan Land Use Designation Map, which designates the Project site use as “Industrial Park (IP).” The Project site is also zoned “Industrial Park (IP),” which allows for a wide variety of industrial users such as research and development, manufacturing, warehouses, and offices. The Project would be consistent with the development assumptions for the land use. Therefore, the Project is consistent with the General Plan assumptions. The proposed Project consists of approximately 714,491 sf of industrial warehouse distribution space, consistent with the Envision San José 2040 General Plan land use designation and would not increase the regional population growth or cause changes in vehicle traffic that would obstruct implementation of the Clean Air Plan in the San Francisco Bay Area Basin (refer to Section 5.0: Growth Inducing Impacts for a detailed discussion of growth impacts).

As described below, construction and operational air quality emissions generated by the proposed Project would not exceed the BAAQMD’s emissions thresholds. Since the proposed Project would not exceed these thresholds, the proposed Project would not be considered by the BAAQMD to be a substantial emitter of criteria air pollutants, and would not contribute to any non-attainment areas in the Basin.

The Project is anticipated to generate approximately 715⁴ jobs within the City. ABAG predicts that job opportunities in the City of San José will grow from 387,510 in 2010 to 554,875 by 2040. The Project is consistent with the City’s General Plan. Therefore the 715 jobs generated by the Project would be within the ABAG growth projections for the City. As identified in the General Plan FEIR, the City currently has a ratio of 0.8 jobs per resident. The General Plan FEIR identified that at full buildout of the General Plan, this ratio would increase to 1.3 jobs per resident. Because the Project is consistent with planned land uses for the Project site, the Project would not exceed the level of population or housing anticipated in regional planning efforts and would be consistent with ABAG’s projections for the City and with the City’s General Plan.

A project would be consistent with the 2017 Clean Air Plan Progress Report if it would not exceed the growth assumptions in the plan. The primary method of determining consistency with the 2017 Clean Air Plan growth assumptions is consistency with the General Plan land use designations and zoning designations for the site. It should be noted that the Clean Air Plan does not make a specific assumption

⁴ The City of San José. Envision 2040 General Plan Draft EIR assumes one job per 1,000 sf of industrial space. ((714,491 SF industrial) / 1,000 SF = 714.49 jobs); Available at <https://www.sanjoseca.gov/home/showpublisheddocument/22041/636688304350830000>. Accessed March 7, 2022.

for development on the site, but bases assumptions on ABAG and MTC growth in population, travel, and business, based on socioeconomic forecasts. As noted above, the Project would not exceed the growth assumptions in the General Plan. Therefore, the growth assumptions in the Clean Air Plan would not be exceeded.

Projects are considered consistent with the 2017 Clean Air Plan if they incorporate all applicable and feasible control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

The Project is consistent with the 2017 Clean Air Plan policies that are applicable to the Project site, as outlined in **Table 3.1-3: Project Consistency with Applicable Clean Air Plan Control Measures**

Table 3.1-3: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Source Control Measures	
SS25: Coatings, Solvents, Lubricants, Sealants and Adhesives	Consistent. The Project would comply with Regulation 8, Rule 3: Architectural Coatings, which would dictate the ROG content of paint available for use during construction.
SS26: Surface Prep and Cleaning Solvent	
SS29: Asphaltic Concrete	Consistent. Paving activities associated with the Project would be required to utilize asphalt that does not exceed BAAQMD emission standards in Regulation 8, Rule 15.
SS31: General Particulate Matter Emissions Limitation	Consistent. This control measure is implemented by the BAAQMD through Regulation 6, Rule 1. This rule limits the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions and opacity. The Project would be required to comply with applicable BAAQMD rules.
SS32: Emergency Back-up Generators	Consistent. The Project would include four backup generators (one per building). The emergency generators installed would be required to meet the BAAQMD's emissions standards for back-up generators.
SS34: Wood Smoke	Consistent. The Project would comply with BAAQMD Regulation 6, Rule 3 and prohibit the construction of wood burning appliances/ fireplaces.
SS36: Particulate Matter from Trackout	Consistent. Mud and dirt that may be tracked out onto the nearby public roads during construction activities would be removed promptly by the contractor based on BAAQMD's requirements and City Standard Permit Conditions.
SS38: Fugitive Dust	Consistent. Material stockpiling and track out during grading activities as well as smoke and fumes from paving and roofing asphalt operations would be required to utilize best management practices, such as watering exposed surfaces twice a day, covering haul trucks, keeping vehicle speeds on unpaved roads under 15 mph, to minimize the creation of fugitive dust (BAAQMD Regulation 6).
SS40: Odors	Consistent. The Project is an industrial development and is not anticipated to generate odors. The Project would comply with BAAQMD Regulation 7 to strengthen odor standards and enhance enforceability.
Transportation Control Measures	
TR2: Trip Reduction Programs	Consistent. The Project would include a number of travel demand measures (TDM) such as bicycle/pedestrian access, reduced roadway

Control Measure	Project Consistency
TR8: Ridesharing and Last-Mile Connections	widths along Commerce Drive and Qume Drive for bicyclist safety, and bicycle parking and storage for employees and visitors. These TDM measures would help reduce vehicle miles traveled (VMT) and mobile greenhouse gas emissions.
TR9: Bicycle and Pedestrian Access Facilities	Consistent. Bicycle facilities in the area include Montague Expressway, Trade Zone Boulevard, Capitol Avenue, Oakland Road, Lundy Avenue, Murphy Road, and Hostetter Road which provide Class II bike lanes with buffered striping to separate the vehicle and bike travel way. The Project would include 32 bicycle parking spaces.
TR10: Land Use Strategies	Consistent. This measure is a BAAQMD funding tool to maintain and disseminate information on current climate action plans and other local best practices and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans. In addition, the proposed Project site is located within 2,000 feet of a transit stops located at the intersections of Lundy Avenue and Concourse Drive and Lundy Avenue and Commerce Drive. Therefore, these employment opportunities would be easily accessible via transit, furthering the City's General Plan goals to support a healthy community, reduce traffic congestion and decrease greenhouse gas emissions and energy consumption. The Project would not conflict with implementation of this measure.
TR13: Parking Policies	Consistent. The proposed Project would create approximately 511 new parking spaces (99 trailer spaces and 412 automobile spaces). The proposed parking is sufficient for the proposed uses.
TR19: Medium and Heavy Duty Trucks	Consistent. The Project includes a warehousing use that would generate truck trips. However, per the Transportation Analysis prepared for the Project (Appendix L of this Draft EIR) there would be approximately 2,035 daily trips. Approximately 17 percent of warehouse fleets are truck trips. Therefore, the Project would have an estimated 344 daily truck trips. However, with consideration for applicable trip reductions and credits, the Project would generate a net total of 0 additional daily trips. The Project would not conflict with the implementation of this measure.
TR22: Construction, Freight and Farming Equipment	Consistent. The Project would comply through implementation of the BAAQMD standard condition, which requires construction equipment to be properly maintained.
Energy and Climate Control Measures	
EN1: Decarbonize Electricity Generation	Consistent. The Project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance. Additionally, the Project would include San José Clean Energy (SJCE) TotalGreen.
EN2: Decrease Electricity Demand	
Buildings Control Measures	
BL1: Green Buildings	Consistent. The Project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance.
L2: Decarbonize Buildings	

Control Measure	Project Consistency
BL4: Urban Heat Island Mitigation	Consistent. The Project would demolish three existing buildings and associated asphalt surfaces. The Project site would be replaced with a similar land use. The Project landscaping would include replacing with 339 new trees which would cover approximately 21 percent of the site with landscaping. The trees would provide shading to help mitigate the urban heat island effect.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	Consistent. The Project site is in an existing industrial park with urban trees in the parking field. The Project would plant 339 new trees (both native and non-native) which would allow for better overall tree health.
Waste Management Control Measures	
WA1: Landfills	Consistent. The waste service provider for the Project would be required to meet the AB 341 and SB 939, 1374, and 1383 requirements that require waste service providers to divert and recycle waste. Per Cal Green requirements the Project would recycle construction waste.
WA3: Green Waste Diversion	
WA4: Recycling and Waste Reduction	
Water Control Measures	
WR2: Support Water Conservation	Consistent. The Project would implement water conservation measures and low flow fixtures as required by Title 24, CalGreen, and the City of San José's Municipal Code Section 15-11 Water Efficient Landscaping Ordinance, which includes various specifications for plant types, water features, and irrigation design etc.
Source: BAAQMD, Clean Air Plan, 2017 and Appendix C of the Draft EIR.	

The Project would generate approximately 715 jobs. The Project is consistent with the anticipated General Plan and therefore the City's projected population growth for the Project site. As a result, the Project would be within the ABAG growth projections for the City of approximately 554,875 jobs by 2040. Thus, the Project would not conflict with or obstruct implementation of the Clean Air Plan and would therefore have a less than the significant impact.

AQ-2

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

Less Than Significant Impact

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the BAAQMD's thresholds of significance (**Table 3.1-4: Construction-Related Emissions** or **Table 3.1-5: Operational-Related Emissions**).

Construction results in the temporary generation of emissions during demolition, site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne

particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water. For this Project, site preparation includes the excavation and removal of previously identified contaminated soils (see Section 3.5 Hazards and Hazardous Materials for a more detailed discussion).

The duration of construction activities associated with the Project are estimated to last approximately 18 months, beginning in April 2024 and concluding at the end of September 2025. The Project's construction-related emissions were calculated using the BAAQMD-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project demolition and site preparation are anticipated to begin in April 2024 and last approximately three months. Project grading and construction is anticipated to begin in July 2024 and last approximately 15 months. The Project would include approximately 5,000 cubic yards (cy) of export, however most of the materials would be balanced on-site. Paving and Architectural Coating were modeled to be completed end of September 2025. The exact construction timeline is unknown at this stage of the Project; however, to be conservative, earlier dates were utilized in the modeling. This approach is conservative given that emissions factors decrease in future years due to regulatory and technological improvements and fleet turnover. See **Appendix C** for additional information regarding the construction assumptions used in this analysis. The Project's predicted maximum daily construction-related emissions are summarized in **Table 3.1-4: Construction-Related Emissions**. A detailed discussion of all construction-period emission sources is included below.

Table 3.1-4: Construction-Related Emissions

Construction Year	Pollutant (maximum pounds per day) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Exhaust		Fugitive Dust	
			Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
2024	3.30	34.45	1.35	1.25	11.34	4.36
2025	47.97	24.54	0.67	0.63	7.12	1.93
Maximum	47.97	34.45	1.35	1.25	11.34	4.36
BAAQMD Significance Threshold^{2,3}	54	54	82	54	BMPs	BMPs
Exceed BAAQMD Threshold?	No	No	No	No	N/A	N/A
<p>1. Emissions were calculated using CalEEMod. Mitigated emissions include compliance with the BAAQMD's Basic Construction Mitigation Measures Recommended for All projects and the City of San José Environmental Standard Conditions. These measures include the following: water exposed surfaces two times daily; cover haul trucks; clean track outs with wet powered vacuum street sweepers; limit speeds on unpaved roads to 15 miles per hour; complete paving as soon as possible after grading; limit idle times to 5 minutes; properly maintain mobile and other construction equipment; and post a publicly visible sign with contact information to register dust complaints and take corrective action within 48 hours.</p> <p>2. Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, updated May 2017.</p> <p>3. BMPs = Best Management Practices. The BAAQMD recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable significance thresholds. Implementation of Basic Construction Mitigation measures are considered to mitigate fugitive dust emissions to be less than significant.</p> <p>Source: Refer to the CalEEMod outputs provided in Appendix A.</p>						

Fugitive Dust Emissions. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill operations, demolition, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The BAAQMD recommends the implementation of all Basic Construction Control Measures, whether or not construction-related emissions exceed applicable significance thresholds. The Project would implement the BAAQMD Basic Construction Control Measures as a Standard Permit Condition to control dust at the Project site during all phases of construction.

Standard Permit Condition

These measures would be included on the Project plan documents prior to the issuance of any grading permits for the proposed Project.

- i. Water active construction areas at least twice daily or as often as needed to control dust emissions.
- ii. Cover trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
- iii. Remove visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- iv. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- v. Pave new or improved roadways, driveways, and sidewalks as soon as possible.
- vi. Lay building pads as soon as possible after grading unless seeding or soil binders are used.
- vii. Replant vegetation in disturbed areas as quickly as possible.
- viii. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- ix. Minimizing idling times either by shutting off equipment when not in use, or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Provide clear signage for construction workers at all access points.
- x. Maintain and properly tune construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.
- xi. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints.

Construction Equipment and Worker Vehicle Exhaust. The Project assumed exhaust emission factors for typical diesel-powered heavy equipment based on the CalEEMod program defaults. Variables factored into estimating the total construction emissions included: level of activity, length of construction period,

number of pieces/types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on-site or offsite. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials and workers to and from the site. Emitted pollutants would include ROG, NO_x, PM₁₀, and PM_{2.5}. The BAAQMD recommends the implementation of all Basic Construction Control Measures, whether or not construction-related emissions exceed applicable significance thresholds. (See the above listed Standard Permit Conditions.) As detailed in **Table 3.1-4**, Project construction emissions would not exceed the BAAQMD thresholds and construction emissions would not result in a potentially significant impact. Therefore, construction air quality impacts would be less than significant.

ROG Emissions. In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O₃ precursors. In accordance with the methodology prescribed by the BAAQMD, the ROG emissions associated with paving have been quantified with CalEEMod.

The highest concentration of ROG emissions would be generated from architectural coating beginning in May 2025 and lasting approximately four months. This phase includes the interior and exterior painting as well as striping of all paved parking areas and driveways. Paints would be required to comply with BAAQMD Regulation 8, Rule 3: Architectural Coating. Regulation 8, Rule 3 provides specifications on painting practices and regulates the ROG content of paint.

Construction-Period Emissions Summary. As shown in **Table 3.1-4**, all criteria pollutant construction emissions would remain below their respective thresholds. BAAQMD considers fugitive dust emissions to be potentially significant without implementation of the Construction Control Measures which help control fugitive dust. NO_x emissions are primarily generated by engine combustion in construction equipment, haul trucks, and employee commuting, requiring the use of newer construction equipment with better emissions controls would reduce construction-related NO_x emissions. With implementation of the Standard Permit Condition above, the proposed Project's construction would not worsen ambient air quality, create additional violations of federal and state standards, or delay the Basin's goal for meeting attainment standards. Impacts would be less than significant.

Operational Emissions

Operational emissions for industrial developments are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling and heating); and area sources (landscape equipment and household products). **Table 3.1-5: Maximum Daily Project Operational Emissions** shows that the Project's maximum emissions would not exceed BAAQMD operational thresholds. A detailed discussion of operational sources of emissions is included below.

Table 3.1-5: Maximum Daily Project Operational Emissions

Emissions Source	Pollutant (maximum pounds per day) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO _x)	Exhaust		Fugitive Dust	
			Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Existing Project Site						
Area	10.73	0.00	0.00	0.00	0.00	0.00
Energy	0.04	0.40	0.03	0.03	0.00	0.00
Mobile	10.95	14.41	0.20	0.19	21.89	6.02
Total Emissions	21.72	14.80	0.23	0.22	21.89	6.02
Proposed Project						
Area	17.58	0.00	0.00	0.00	0.00	0.00
Energy	0.07	0.66	0.05	0.05	0.00	0.00
Mobile	5.09	26.40	0.21	0.20	14.50	3.88
Stationary ²	1.23	5.50	0.18	0.18	0.00	0.00
Total Project Emissions	23.97	32.57	0.44	0.43	14.50	3.88
Net Emissions						
Existing Project Site	21.72	14.80	0.23	0.22	21.89	6.02
Proposed Project	23.97	32.57	0.44	0.43	14.50	3.88
Net Change	+2.25	+17.77	+0.21	+0.21	-7.39	-2.14
<i>BAAQMD Significance Threshold³</i>	54	54	82	54	N/A	N/A
BAAQMD Threshold Exceeded?	No	No	No	No	N/A	N/A
1. Emissions were calculated using CalEEMod.						
2. Stationary emissions source includes the four backup generators associated with the Project.						
3. Bay Area Air Quality Management District, <i>California Environmental Quality Act Air Quality Guidelines</i> , 2017.						
Source: Refer to the CalEEMod outputs provided in Appendix C of Draft EIR.						

Area Source Emissions. Area source emissions would be generated due to the use of consumer products, architectural coating, and landscaping.

Energy Source Emissions. Energy source emissions would be generated as a result of electricity usage associated with the Project. The primary use of electricity by the Project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

Mobile Source Emissions. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern (NO_x and ROG react with sunlight to form O₃ [photochemical smog], and wind currents readily transport PM₁₀ and PM_{2.5}). However, CO tends to be a localized pollutant, dispersing rapidly at the source. Project-generated vehicle emissions have been estimated using CalEEMod. Trip generation rates associated with the Project were based on the Project Transportation Analysis (Appendix L). Based on the transportation analysis, the Project would result in a gross total of 2,408 daily vehicle trips. However, with applicable trip reductions including location-based mode-share the Project would result in 2,035 new

trips. The existing site generates 3,565 vehicle trips, therefore the Project would not generate any additional daily trips.

Total Operational Emissions. As seen in **Table 3.1-5**, net Project operational emissions would not exceed BAAQMD thresholds. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur. Project operational emissions would be less than significant.

Cumulative Short-Term Emissions

The Basin is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards and nonattainment for O₃ and PM_{2.5} for Federal standards. As discussed above, and identified in **Table 3.1-4**, the Project's construction-related emissions would not exceed the BAAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether an individual Project's emissions have the potential to affect cumulative regional air quality, it can be expected that the Project-related construction emissions would not be cumulatively considerable. The BAAQMD recommends Basic Construction Control Measures for all projects whether or not construction-related emissions exceed the thresholds of significance. Compliance with BAAQMD construction-related measures are considered to reduce cumulative impacts at a Basin-wide level. As a result, construction emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

CUMULATIVE LONG-TERM IMPACTS

The BAAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a Project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a Project that exceeds the BAAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.⁵ As shown in **Table 3.1-5**, the Project's operational emissions would not exceed BAAQMD thresholds. As a result, operational emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

AQ-3 *Would the Project expose sensitive receptors to substantial pollutant concentrations?*

⁵ In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD CEQA Guidelines page 2-1).

Less Than Significant with Mitigation Incorporated

Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The State CEQA Guidelines indicate that a potentially significant impact could occur if a project would expose sensitive receptors to substantial pollutant concentrations. As shown in **Table 3.1-1: Sensitive Receptors** the nearest sensitive receptors are located 140 feet east of the Project site.

CONSTRUCTION PERIOD TOXIC AIR CONTAMINANTS

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust which is a known Toxic Air Contaminants (TAC). Diesel exhaust from construction equipment operating at the site could pose a health risk to nearby sensitive receptors. However, the use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the Project site. Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduces diesel particulate matter (DPM) and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

As noted in the Health Risk Assessment (HRA) (Appendix D), maximum (worst case) PM_{2.5} exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. See the HRA (Appendix D) for additional methodology on the modeling analysis. Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines. Results of this assessment are summarized in **Table 3.1-6: Construction Risk**.

Table 3.1-6: Construction Risk

Emissions Sources	Pollutant Concentration ($\mu\text{g}/\text{m}^3$)	Cancer Risk (per Million)	Chronic Hazard	Acute Hazard
Unmitigated Scenario				
Construction	0.05	14.95	0.009	0.115
<i>BAAQMD Threshold</i>	<i>0.3</i>	<i>10</i>	<i>1.0</i>	<i>1.0</i>
Threshold Exceeded?	No	Yes	No	No
Mitigated Scenario¹				
Construction	0.01	1.71	0.001	0.012
<i>BAAQMD Threshold</i>	<i>0.3</i>	<i>10</i>	<i>1.0</i>	<i>1.0</i>
Threshold Exceeded?	No	No	No	No
1. Heavy-duty off-road construction equipment would also meet CARB Tier 4 Final emissions standards per Mitigation Measure AQ-1. The Tier 3 construction equipment with 85 percent PM reduction filters would result in 0.013 $\mu\text{g}/\text{m}^3$ with a cancer risk of 4.18 per million. This would be below BAAQMD thresholds. 2. Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age. Refer to Appendix D of the Draft EIR.				

Maximum unmitigated concentration of PM_{2.5} during construction would be 0.05 µg/m³, which would not exceed the BAAQMD threshold of 0.3 µg/m³. The highest calculated unmitigated carcinogenic risk from Project construction would be 14.95 per million (based on PM_{2.5} exhaust), which would exceed the BAAQMD threshold of 10 in one million. The maximally exposed individual (MEI) during construction (i.e., the closest sensitive receptor) to the Project site are the residences across the railroad tracks (approximately 140 feet away). As such, the Project would be required to implement Mitigation Measure AQ-1.

Impact AQ-1: Without mitigation, construction activities associated with the proposed Project could expose sensitive receptors near the Project site to cancer risk due to toxic air contaminants (TAC) emissions that could exceed BAAQMD threshold for cancer risk of 10 per million by 5 per million.

Mitigation Measure

AQ - 1 Tier 4 Final Construction Equipment

Prior to issuance of any demolition, grading permits, and/or building permits (whichever occurs earliest), the Project applicant shall prepare and submit a construction operations plan that includes specifications of the equipment to be used during construction to the Director of Planning, Building and Code Enforcement or the Director's Designee. The plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying that the equipment included in the plan meets the standards set forth below.

- For all construction equipment larger than 25 horsepower operating on the site for more than two days continuously or 20 total hours, shall, at a minimum meet U.S. EPA Tier 4 Final emission standards.
- If Tier 4 Final equipment is not available, all construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85 percent reduction in particulate matter exhaust and 40 percent reduction in NOx in comparison to uncontrolled equipment.

Prior to the issuance of any demolition, grading, and/or building permits, the project applicant shall submit a construction operations plan prepared by the construction contractor that outlines how the contractor will achieve the measures outlined in this mitigation measure. The plan shall be submitted to the Director of Planning, Building and Code Enforcement or the Director's designee for review and approval prior to the issuance of any demolition, grading and/or building permits (whichever occurs earliest). The plan shall include, but not be limited to the following:

- List of activities and estimated timing.
- Equipment that would be used for each activity.
- Manufacturer's specifications for each equipment that provides the emissions level; or the manufacturer's specifications for devices that would be added to each piece of equipment to ensure the emissions level meet the thresholds in the mitigation measure.

- How the construction contractor will ensure that the measures listed are monitored.
- How the construction contractor will remedy any exceedance of the thresholds.
- How often and the method the construction contractor will use to report compliance with this mitigation measure.

Implementation of the mitigations described above will reduce the impacts to cancer risk from 15 per one million to 2 per one million. This is below BAAQMD significance thresholds of 10 per one million for cancer risk.

Mitigation Measure AQ-1 would reduce the Project PM_{2.5} concentration to 0.01 µg/m³ and would reduce the Project's maximum cancer risk to 1.71 per million, which would be below the BAAQMD thresholds of 0.3 µg/m³ and 10 in one million, respectively. Non-cancer hazards for DPM would be below BAAQMD threshold, with a chronic hazard index computed at 0.009 and an acute hazard index of 0.115 without mitigation, and 0.001 and 0.012 with mitigation. Acute and chronic hazards would be below the BAAQMD significance threshold of 1.0. As such, implementations of Mitigation Measure AQ-1 would reduce construction-period cancer risk levels to be below the BAAQMD's thresholds. Therefore, implementation of Mitigation Measure AQ-1 would reduce the potentially significant construction-period cancer risk impact to a less than significant level.

OPERATIONAL TOXIC AIR CONTAMINANTS

The Project would demolish the three existing buildings on-site and construct four new warehouse industrial buildings, totaling approximately 714,791 sf. According to the Transportation Analysis (Appendix L), the Project would include use of passenger vehicles, vans, and trucks. The Project is anticipated to generate approximately 2,035 daily vehicle trips (0 net daily trips). The Project also includes one backup generator per building. As shown in **Table 3.1-7: Operational Risk Assessment Results**, the highest calculated carcinogenic risk resulting from the Project operations is 0.48 per million residents⁶, which is below the BAAQMD threshold of 10 per million. Acute and chronic hazards also would be below the BAAQMD significance threshold of 1.0. Operational impacts would be less than significant.

Table 3.1-7: Operational Risk Assessment Results

Exposure Scenario	Pollutant Concentration (µg/m ³)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Particulate Matter (PM _{2.5})	0.001	0.48	0.00001	0.003
<i>Threshold</i>	<i>NA</i>	<i>10</i>	<i>1.0</i>	<i>1.0</i>
Exceed Threshold?	No	No	No	No
Refer to Appendix A: Modeling Data .				
1. The maximum cancer would be experienced at a residences across the BART tracks east of the Project site based on worst-case exposure durations for the Project, 95 th percentile breathing rates, and 30-year exposure duration.				
2. Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age.				

The pollutant concentrations modeled in AERMOD evaluate the cancer risk exposure levels outdoors for the nearest sensitive receptors. The BAAQMD conservatively does not include indoor exposure

⁶ Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age.

adjustments for residents. However, the typical person spends the majority of time indoors rather than remaining outdoors in the same location for 24 hours a day.⁷ Therefore, the AERMOD outdoor pollutant concentrations are not necessarily representative of actual exposure at the Project site and tend to overestimate exposure. As such, the modeled results are a conservative estimation.

CUMULATIVE HEALTH RISK ANALYSIS

Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Worst-case PM_{2.5} concentrations and chronic hazard levels for the Project would be well below the BAAQMD's thresholds. CEQA Guidelines 15065(a)(3) states "... 'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Mobile and stationary sources within a 1,000-foot radius of the Project site were reviewed using BAAQMD's Stationary Source Screening Analysis Tools. There are two stationary sources located within a 1,000-foot radius of the Project site. One is the BD Biosciences with an existing cancer risk of 0.53 per one million and the other is HGST, Inc. with a cancer risk of 0.83 per one million. As shown in **Table 3.1-8: Cumulative Operational Health Risk**, cumulative impacts related to cancer risk and hazard would be less than cumulatively considerable and within acceptable limits. Additionally, cumulative residential PM_{2.5} would not exceed the BAAQMD's cumulative threshold of 0.3 µg/m³, the primary contributor to those concentrations is the existing highway sources near the Project area. The existing highway sources have a high PM_{2.5} (0.26 µg/m³). The highway sources represent approximately 87 percent of the total concentrations and are completely unrelated to the Project. The Project represents less than 1.3 percent of total cumulative PM_{2.5} in the Project area. Therefore, the Project's cumulative impacts would be less than significant.

Table 3.1-8: Cumulative Operational Health Risk

Emissions Sources	PM _{2.5} (µg/m ³)	Cancer Risk (per million)	Hazard
Project Mobile Emissions	0.001	0.48	0.0001
Stationary Sources			
<i>BD Biosciences</i>	0.001	0.53	0.001
<i>HGST, Inc</i>	0.002	0.83	0.002
Major Street Sources¹	0.04	1.60	0.16
Highway Sources¹	0.26	13.34	1.04
Railway Sources¹	0.00	0.10	0.00
Cumulative Health Risk Values	0.30	16.88	1.20
<i>BAAQMD Cumulative Threshold</i>	<i>0.8</i>	<i>100</i>	<i>10</i>

⁷ California Air Resources Board Research Division and University of California, Berkeley, *Activity Patterns of California Residents*, May 1991. The study indicates that on average, adults and adolescents in California spent almost 15 hours per day inside their homes, and 6 hours in other indoor locations, for a total of 21 hours (87% of the day). Approximately two hours per day were spent in transit, and just over one hour per day was spent in outdoor locations.

Emissions Sources	PM _{2.5} (µg/m ³)	Cancer Risk (per million)	Hazard
Threshold Exceeded?	No	No	No
1. BAAQMD GIS data. Source: BAAQMD's Stationary Source Data and GIS Mapping Tools, 2022.			

As described above in **Table 3.1-8**, cumulative impacts related to cancer risk and hazard would not be cumulatively considerable and would be within acceptable limits. Additionally, cumulative PM_{2.5} concentrations at the residential MEI would not exceed the BAAQMD's cumulative threshold of 0.3 µg/m³, the primary contributor to those concentrations is the existing highway sources near the Project area which includes I-680 and I-880. Using BAAQMD's GIS mapping tools PM_{2.5} concentrations and cancer risk can be evaluated as individual data points near the Project site. The existing highway sources have a high PM_{2.5} (0.26 µg/m³). The highway sources represent approximately 87 percent of the total cumulative concentrations and are unrelated to the Project. The Project represents less than 0.3 percent of total cumulative PM_{2.5} in the Project area. Therefore, the Project's cumulative impacts would be less than significant.

MOBILE SOURCES

The Project does not include the introduction of new sensitive receptors to the Project site, and would therefore not place sensitive receptors within 1,000-feet of a major roadway (mobile TAC source). Additionally, the Project's effects to existing vehicle distribution and travel speeds would be nominal. According to the Transportation Analysis (Appendix L), the Project would generate 0 net new daily trips. Any changes to vehicle distribution and travel speeds can affect vehicle emissions rates, although these changes would be minimal and would not substantially change criteria pollutant emissions, which are primarily driven by vehicle miles traveled (VMT). According to Transportation Analysis (Appendix L), the proposed Project would have lower VMT than the existing conditions. The Project does not involve the increase of transit trips or routes and would not generate increased emissions from expanded service (e.g., increased bus idling service).

CARBON MONOXIDE HOTSPOTS

The primary mobile-source criteria pollutant of local concern is carbon monoxide. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

The Basin is designated as in attainment for carbon monoxide (CO). Emissions and ambient concentrations of CO have decreased dramatically in the Basin with the introduction of the catalytic converter in 1975. No exceedances of the CAAQS or NAAQS for CO have been recorded at nearby monitoring stations since

1991. As a result, the BAAQMD screening criteria notes that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where “urban canyons” formed by buildings tend to reduce air circulation.

According to the Transportation Analysis prepared for the Project (Appendix L), the Project would not generate any net new daily trips. The Project’s effects to existing vehicle distribution and travel speeds would be nominal as the Project is not resulting in an LOS delay at any intersections evaluated. The Project would not increase traffic volumes in intersections with more than 24,000 or 44,000 vehicles per hour. As a result, the Project would not have the potential to create a CO hotspot and impacts would be less than significant.

AQ-4 ***Would the Project result in other emissions such as those leading to odors adversely affecting a substantial number of people?***
Less Than Significant Impact.

CONSTRUCTION

According to the BAAQMD CEQA Guidelines, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The Project does not include any uses identified by the BAAQMD as being associated with odors.

Construction activities associated with the Project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Any construction-related odors would be short-term in nature and cease upon Project completion. As a result, impacts to existing adjacent land uses from construction-related odors would be short-term in duration and would be less than significant.

OPERATIONAL

BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. BAAQMD’s thresholds for odors are qualitative based on BAAQMD’s Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds.

The Project does not include uses that would generate objectionable odors. None of the above listed odor generating uses are located near the Project site. As such, operational impacts related to objectionable odors would be less than significant.

3.2 BIOLOGICAL RESOURCES

An Arborist Report has been prepared by Traverso Tree Service, Inc. (September, 2021) to address potential impacts to biological resources, specifically native trees, associated with Project implementation. The following discussion and analysis is based on the Arborist Report, and the report is included as Appendix D of this Draft EIR.

ENVIRONMENTAL SETTING

CITY-WIDE SETTING

The City of San José contains a range of environmental resources across a diverse landscape. The City's natural setting includes hillsides, riparian corridors, lakes, the San Francisco Bay, and adjacent Baylands. As discussed in the Biological Resources Report prepared as part of the General Plan EIR, the City's biological study area is generally defined by the San Francisco Bay to the north, the Diablo Range to the east, and the Santa Cruz Mountains to the west. The City is within the Santa Clara Valley, which is defined by a series of creeks and rivers, waterways, and five watersheds.

PROJECT VICINITY

The proposed Project is located within an urbanized area of the City of San José. The site is currently developed with an aging industrial/business park complex containing three buildings totaling approximately 425,433 square feet. The Project site is surrounded by developed-land use types including commercial and industrial to the north, south, and west and residential uses beyond the BART railway corridor to the east. There is existing landscaping along the Project boundary and surface parking areas, including a manmade landscape pond on the northern portion of the site. The nearest waterway is Coyote Creek, located approximately 1.30-miles west of the Project site.⁸

Natural Communities and Habitats

Eight main habitat types are present within the City limits of San José. These include developed, agricultural, grasslands, riparian forest and scrub, chaparral and coastal scrub, oak woodland, wetland, and aquatic/open water. Several habitats found within the City limits are considered to be sensitive habitats by state and federal agencies, such as U.S. Army Corps of Engineers, the Regional Water Quality Control Board, the US Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG). These include wetland and aquatic habitat, stream and riparian habitat, serpentine habitat, and oak woodland habitat. In addition, sensitive habitats tracked by the CDFW's Natural Diversity Database that occur within the City limits include Northern Coastal Salt Marsh, Serpentine Bunchgrass Grassland, and Sycamore Alluvial Woodland.

Approximately 68 percent of the area within the City limits and 80 percent of the area within the City's Urban Growth Boundary (UGB) are occupied by developed urban and suburban land uses. Developed habitat types differ widely in the amount and types of plant species that they support. Some areas are fully developed areas barren of vegetation, such as portions of industrial or commercial sites, completely paved, and high-density urban housing. In general, the developed land use type provides low habitat value for regionally occurring species. Developed or landscaped habitats typically support relatively common

⁸ U.S. Fish and Wildlife Service, 2022. National Wetlands Inventory, Wetlands Mapper. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed March 10, 2022.

wildlife species that are tolerant of periodic human disturbance. Some of the most abundant species in developed habitats, such as the European starling, rock pigeon, house sparrow, Virginia opossum, house mouse, eastern gray squirrel, fox squirrel, Norway rat, and black rat are non-native species that are well adapted to the cover, nesting/denning, and foraging conditions provided by developed areas. In addition, a number of native species have adapted to these conditions. Native bird species commonly found in developed habitats in San José include the house finch, northern mockingbird, Anna's hummingbird, and California towhee. Native mammals such as the deer mouse, raccoon, and striped skunk utilize these developed areas as well.

The General Plan classifies the Project site and the immediate vicinity as developed land. The Project area is heavily disturbed and characterized by industrial and commercial development with associated roadways, sidewalks, driveways, outbuildings and mature landscaping. Human-altered landscapes that contain large amounts of paved surfaces and/or landscaped gardens with ornamental and/or weedy species are generally considered "developed." Existing trees and landscaping would be expected to support some of the common species listed above.

Movement Corridors

Movement corridors, or landscape linkages, are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression, and increasing the potential for recolonization of habitat patches. Habitat corridors are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species make their living). Connections between two or more core habitat areas help ensure that genetic diversity is maintained, thereby diminishing the probability of inbreeding depression and geographic extinctions. This is especially true in fragmented landscapes and the surrounding urbanized areas as found in the rural/urban matrix along the edges of the City of San José. Movement corridors in California are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles.

The Project site itself is not a movement corridor, and it does not provide the functions and values of a habitat corridor because it is entirely developed with urban uses and is not a linkage between two habitat areas. Further, the Project site is not located adjacent to identified riparian corridors within the City, such as Coyote Creek and the Guadalupe River.

TREES

Typical to an office park development, buildings and hardscape comprise the majority of the total surface area of the site. Landscaping is restricted to small planters and narrow landscape strips, many of which are over-planted with trees. Undeveloped patches of landscaping along the northeast property line have allowed volunteer trees to establish, in contrast to the deliberately planted trees found throughout the rest of the property. The Project site contains 702 trees, including 349 Ordinance-size trees. While all trees are subject to the City of San José Tree Ordinance, only trees meeting the size criteria require a permit for removal, as specified under the Regulatory Framework section below. The most common species include evergreen ash (*Fraxinus uhdei*; 27 percent of total), followed by London planetree (*Platanus x hispanica*; 22 percent) and mulberry (*Morus alba*; 12 percent) which are all non-native. Native species consist of

coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and elderberry (*Sambucus sp.*). The site has 32 native trees (only 4.4 percent of the total tree population on-site).

The existing landscape, including trees, do not appear to be properly maintained. Pruning practices, include lion's-tailing (removal of interior foliage), excessive canopy raising, and clearance pruning from buildings, are affecting overall tree health. Root damage from lawnmowers, string trimmers and hardscape repair are commonplace due to the co-existence of trees and lawn and/or hardscape. Insufficient irrigation is a problem for the trees in the smallest parking lot planters, especially the mulberries. This species is known for its dark green, vigorous and dense canopy but most of the mulberries are stunted, with branch dieback and sparse and yellowed foliage. Even so, they are causing significant damage to the parking lot, lifting curbs and parking spaces well above the original grade. The native oaks are doing particularly well, which is expected since they are accustomed to dry summers and typically do not require supplemental irrigation. **Table 3.2-1: On-Site Tree Species** below lists all species and their contribution to species diversity.

Table 3.2-1: Existing On-Site Tree Species

Common Name	Botanical Name	# of Trees	Percent Total	Native?
Evergreen Ash	<i>Fraxinus uhdei</i>	188	26.8%	No
London planetree	<i>Platanus x hispanica</i>	156	22.2%	No
Mulberry	<i>Morus alba</i>	85	12.1%	No
Coast redwood	<i>Sequoia sempervirens</i>	46	6.6%	No
Holly oak	<i>Quercus ilex</i>	43	6.1%	No
European hornbeam	<i>Carpinus betaulus</i>	31	4.4%	No
Evergreen pear	<i>Pyrus kawakamii</i>	29	4.1%	No
Water gum	<i>Tristaniopsis laurina</i>	29	4.1%	No
Coast live oak	<i>Quercus agrifolia</i>	17	2.4%	Yes
Valley oak	<i>Quercus lobata</i>	13	1.9%	Yes
Chinese elm	<i>Ulmus parvifolia</i>	9	1.3%	No
Ironbark eucalyptus	<i>Eucalyptus sideroxylon</i>	8	1.1%	No
Eastern redbud	<i>Cercis canadensis</i>	7	1.0%	No
Olive	<i>Olea europea</i>	6	0.9%	No
Red oak	<i>Quercus rubra</i>	6	0.9%	No
Ginkgo	<i>Ginkgo biloba</i>	6	0.9%	No
Deodar cedar	<i>Cedrus deodara</i>	5	0.7%	No
Peppermint eucalyptus	<i>Eucalyptus nicholii</i>	4	0.6%	No
Crape myrtle	<i>Lagerstroemia CV</i>	3	0.4%	No
White birch	<i>Betula pendula</i>	2	0.3%	No
Callery pear	<i>Pyrus calleryana</i>	2	0.3%	No
Mayten	<i>Maytenus boaria</i>	2	0.3%	No
Japanese maple	<i>Acer palmatum</i>	2	0.3%	No
Elderberry	<i>Sambucus sp.</i>	1	0.1%	Yes
Camphor	<i>Cinnamomum camphora</i>	1	0.1%	No
Himalayan birch	<i>Cetula jacquemontii</i>	1	0.1%	No
TOTAL		702	100.0%	4.4%
Source: Appendix E, Arborist Report.				

SPECIAL STATUS PLANTS

The Project site is located in an urban residential area that has been graded and developed. No natural plant communities are present within the Project site. Of the species of special status plants that occur within the Santa Clara Valley, no special status plant species would occur within the Project site due to low quality habitat and the extent of existing development. According to a search of the California Natural Diversity Database (CNDDDB) conducted on January 8, 2022, one special status plant species, Robust spineflower (*Chorizanthe robusta*), has the potential to occur in the Project area. However, the CNDDDB results indicate that the original occurrence that indicates the species' likelihood to occur was not Project site specific and occurred in 1882 prior to the development of the area. Thus, special status plant species would not be anticipated to occur within the Project site due to the occurrence not being within the Project site and the extent of Project site development since the occurrence was recorded.

SPECIAL STATUS ANIMALS

The Biological Resources Report prepared for the Envision 2040 San José General Plan evaluated over 50 special-status animal species known to occur or potentially occurring within the City limits. Special-status animals known to occur within the City limits were identified based on a review of CNDDDB records, work completed by the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan project, and biological resources reports previously prepared for various sites in the City of San José and vicinity. These species and their habitats are listed in General Plan EIR Table 3.5-3. Of these, a majority of species would be absent or unlikely to occur on the Project site due to a lack of suitable habitat types. These species include the California horned lizard, Golden eagle, northern harrier, white-tailed kite, American peregrine falcon, black skimmer, long-eared owl, western burrowing owl, Swainson's hawk, northern harrier, white-tailed kite, western yellow-billed cuckoo, tricolored blackbird, black swift, California yellow warbler, Alameda song sparrow, San Francisco dusky-footed woodrat, American badger, and ringtail.

A search of the CNDDDB on January 8, 2022 indicated that five special status animal species have the potential to occur within the Project area. These species include: Northern California legless lizard, California tiger salamander, western bumble bee, Crotch's bumble bee, and yellow rail. All occurrences in the Project area were recorded prior to 1980, which predates development of the Project area. No occurrences were recorded as having occurred within the Project site. The two bumble bee species and yellow rail are presumed extant for a range that includes the Project site given their high mobility. However, the highly developed and disturbed nature of the Project site precludes these species from permanently occurring within the Project site due to a lack of habitat and high disturbance. The legless lizard and tiger salamander are unlikely to occur on the Project site due to a lack of specialized habitat required for these species and high disturbance. Given the specific habitat needs of these species (e.g., permanent aquatic features and areas for burrowing) they would not occur on the developed and disturbed Project site. Therefore, special status animal species would not be anticipated to occur on the Project site.

As noted previously, the site consists of a "developed" habitat type with limited resource value supporting common species adaptable to urban environments. Such species include native or nesting bird species commonly found in developed habitats in the region including the house finch, northern mockingbird, Anna's hummingbird, and California towhee.

JURISDICTIONAL WATERS

No jurisdictional waters or wetlands occur on the Project site and the Project is not expected to impact the bed or bank of any jurisdictional waters. The nearest waterbody is Coyote Creek, approximately 1.3 miles away.

REGULATORY FRAMEWORK

FEDERAL AND STATE

Threatened and Endangered Species

State and federal “endangered species” legislation has provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a listed species. To “take” a listed species, as defined by the state of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” said species (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Migratory Bird Treaty Act

Migratory birds, including raptors (i.e., birds of prey) are protected by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits killing, possessing, or trading in migratory birds, except under the terms of a valid permit issued pursuant to Federal regulations. The MBTA protects whole birds, parts of birds, bird nests, and eggs.

Wetlands and Other “Jurisdictional Waters”

Section 404 of the federal Clean Water Act (CWA) regulates the discharge of dredged or fill material into “navigable waters” (33 U.S.C. §1344), which the CWA defines as “the waters of the United States, including the territorial seas” (33 U.S.C. §1362(7)). The CWA does not provide a definition for waters of the U.S., and that has been the subject of considerable debate since the Act’s passage in 1972. A variety of regulatory definitions have been promulgated by the two federal agencies responsible for implementing the CWA, the Environmental Protection Agency (EPA) and USACE. These definitions have been interpreted, and in some cases, invalidated, by federal courts.

In 2015, the EPA and USACE jointly issued the Clean Water Rule (CWR), providing a synthesized definition of waters of the U.S. based on statute, science, and federal court decisions to date. Subsequent litigation delayed implementation of the CWR. However, in August 2018, the CWR was enjoined in 22 states including California.

On September 12, 2019 the EPA and USACE repealed the 2015 CWR. However, new definitions of what constitutes a water of the U.S. have not been presented by the EPA or USACE. Furthermore, the repeal does not become effective until 60 days after the September publication of the appeal in the Federal Register. Therefore, at the time of this analysis the CWR is still in effect. However, this will soon change.

The CWR defines waters of the U.S. to include the following:

- (a)(1) Waters: All waters used in interstate or foreign commerce (also known as traditional navigable waters), including all waters subject to the ebb and flow of the tide;
- (a)(2) Waters: All interstate waters including interstate wetlands;
- (a)(3) Waters: The territorial seas;
- (a)(4) Waters: All impoundments of Waters of the U.S.;
- (a)(5) Waters: All tributaries of (a)(1)-(a)(4) waters, where “tributary” refers to a water (natural or constructed) that contributes flow to another water and is characterized by the physical indicators of a bed and bank and an ordinary high water (OHW) mark;
- (a)(6) Waters: Adjacent waters, defined as either (a) located in whole or in part within 100 feet of the OHW mark of (a)(1)-(a)(5) waters, or (b) located in whole or in part within the 100-year floodplain and within 1,500 feet of the OHW mark of (a)(1)-(a)(5) waters;
- (a)(7) Waters: Western vernal pools, prairie potholes, Carolina bays and Delmarva bays, pocosins, and Texas coastal prairie wetlands, if determined on a case-specific basis to have a significant nexus to (a)(1)-(a)(3) waters;
- (a)(8) Waters: Waters that do not meet the definition of adjacency, but are determined on a case-specific basis to have a significant nexus to (a)(1)-(a)(3) waters, and are either located in whole or in part within the 100-year floodplain of (a)(1)-(a)(3) waters, or located within 4,000 feet of the OHW mark of (a)(1)-(a)(5) waters.

The CWR also redefines exclusions from jurisdiction, which include:

- (b)(1) Waters: Waste treatment systems;
- (b)(2) Waters: Prior converted cropland;
- (b)(3) Waters: Three types of ditches. A ditch may be a water of the U.S. only if it meets the definition of “tributary” and is not otherwise excluded under the provisions below.
 - (i) Ditches with ephemeral flow that are not a relocated or excavated tributary;
 - (ii) Ditches with intermittent flow that are not a relocated or excavated tributary or that do not drain wetlands;
 - (iii) Ditches that do not flow, either directly or through another water, to an (a)(1)-(a)(3) water.

(b)(4) Waters: Other aquatic features:

- Artificially irrigated areas that would revert to dry land should application of irrigation water to that area cease.
- Artificially constructed lakes or ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, log cleaning ponds, cooling ponds, or fields flooded for rice growing.
- Artificial reflecting pools or swimming pools created in dry land.
- Small ornamental waters created in dry land for primarily aesthetic reasons.
- Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand or gravel that fill with water.
- Erosional features, including gullies, rills and other ephemeral features that do not meet the definition of a tributary; non-wetland swales; and lawfully constructed grassed waterways.
- Puddles.

(b)(5) Waters: Groundwater and artificially constructed subsurface drainage systems in dry land;

(b)(6) Waters: Stormwater control features constructed to convey, treat, or store stormwater created in dry land. Does not include features that possess perennial flow, even if constructed in dry land.

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to Section 404 permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board has regulatory authority to protect the water quality of all surface water and groundwater in the State of California (“Waters of the State”). Nine RWQCBs oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into Waters of the State through the issuance of various permits and orders. Discharges into Waters of the State that are also Waters of the U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all Waters of the State, even those that are not also Waters of the U.S., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a Water of the U.S. may require a NPDES permit. CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California

Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.

REGIONAL

Santa Clara Valley Habitat Plan/ Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (SCVHP) was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill and Gilroy, Santa Clara Valley Water District, Santa Clara Valley Transportation Authority, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife. The SCVHCP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The Project site is located within the boundaries of the SCVHP and is designated Urban- Suburban which comprises of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures.

LOCAL

City of San José Tree Ordinance

The City of San José tree ordinance (Chapter 13.32 of the Municipal Code) regulates the removal of trees. A tree removal permit is required by the City prior to the removal of any trees on commercial and industrial lots with special attention given to ordinance-size trees. An “ordinance-size tree” is:

- a single trunk measuring 38 inches or more in circumference at the height of 54 inches (i.e., 4 ½ feet) above natural grade; or
- a multi-trunk with combined measurements of each trunk circumference at 54 inches (i.e. 4 ½ feet) above natural grade adding up to 38 inches or more.

On private property, tree removal permits are issued by the Department of Planning, Building and Code Enforcement. Tree removal or modifications to all trees on public property (e.g., street trees within a parking strip or the area between the curb and sidewalk) are handled by the City Arborist.

The City's Heritage Tree List identifies more than 100 trees with special significance to the community because of their size, history, unusual species, or unique quality. Pursuant to Chapter 13.28 of the San José Municipal Code, it is illegal to prune or remove a heritage tree without first consulting the City Arborist and obtaining a permit.

The City's tree removal permit requires the applicant to provide the reason for removal or replacement. In order to approve tree removals, one of the following findings must be made: (1) The tree is a safety hazard, (2) The tree is dead, dying, or diseased, (3) The tree is unsuitable, or (4) The tree restricts economic development, and proposed improvement of a parcel. As further noted by the City of San José Community Forest Management Plan, a tree removal permit can be issued for trees that have been found by the City

Council to be “uniquely less compatible with the immediate environment because the species is invasive or non-native to the San José region or is susceptible to disease” (San José Municipal Code 13.32.020).

City of San José Community Forest Management Plan

The City of San José Community Forest Management Plan (CMFP) is a long-term strategy to build a strong and resilient landscape. The CFMP is shaped by four guiding principles: equity, diversity, and inclusion; innovation; regional identity; and resilient San José. The CFMP analyzes the City’s existing Community Forest Program, outlines goals for a sustainable community forest, and updates the City’s Tree Policy and Best Practices Manual. The Tree Policy and Best Practices Manual includes a summary of all existing tree-related ordinances, policies, maintenance practices, landscape practices, and standard details that apply throughout the City. This section provides clarity for City staff and residents on the expected standards for tree planting, watering, tree staking, pruning, irrigation installation, and other physical actions that impact trees.

City of San José General Plan

The City’s General Plan includes the following biological resource policies applicable to the Project:

- Policy ER-5.1: Avoid implementing activities that result in the loss of active native birds’ nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.

- Policy ER-5.2: Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

- Policy ER-6.5: Prohibit use of invasive species, citywide, in required landscaping as part of the discretionary review of proposed development.

- Policy ER-6.7: Include barriers to animal movement within new development and, when possible, within existing development, to prevent movement of animals (e.g., pets and wildlife) between developed areas and natural habitat areas where such barriers will help to protect sensitive species.

- Policy ER-6.8: Design and construct development to avoid changes in drainage patterns across adjacent natural areas and for adjacent native trees, such as oaks.

- Policy MS-21.4: Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.

- Policy MS-21.5: As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.

- Policy MS-21.6: As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.
- Policy MS-21.7: Manage infrastructure to ensure that the placement and maintenance of street trees, streetlights, signs and other infrastructure assets are integrated. Give priority to tree placement in designing or modifying streets.
- Policy MS-21.8: For Capital Improvement Plan or other public development projects, or through the entitlement process for private development projects, require landscaping including the selection and planting of new trees to achieve the following goals:
- Avoid conflicts with nearby power lines.
 - Avoid potential conflicts between tree roots and developed areas. • Avoid use of invasive, non-native trees.
 - Remove existing invasive, non-native trees.
 - Incorporate native trees into urban plantings in order to provide food and cover for native wildlife species.
 - Plant native oak trees and native sycamores on sites which have adequately sized landscape areas and which historically supported these species.
- Policy IN-1.11: Locate and design utilities to avoid or minimize impacts to environmentally sensitive areas and habitats.
- Policy CD 1.24: Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a biological resources impact is considered significant if the Project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The following impact analysis evaluates the Project's potential to result in biological impacts.

BIO-1 ***Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less Than Significant Impact

CONSTRUCTION AND OPERATION

The Project site is categorized as “developed” habitat, consists of low quality habitat, and based on the current site conditions and the findings of the CNDDDB search would not support sensitive or special status plant or animal species. For these reasons, the Project would not have an adverse effect, directly or indirectly, on any species identified as a candidate, sensitive, or special status species as recognized in local, State or federal listings.

Normal operational activities of the new structures would not be substantially different from existing industrial park uses in terms of urban activity in an urban setting. Replanted trees and landscaping would provide new opportunities for nesting and foraging once these areas are established but would not be expected to support sensitive or special status species.

BIO-2 ***Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?***

No Impact

Riparian habitat and sensitive natural communities, including wetlands, are absent from the Project site. The nearest riparian habitat is located along Coyote Creek approximately 1.3 miles west of the Project site. Given that the Project is located 1.3 miles from the Coyote Creek and the associated riparian habitat, the Project would not result in any direct impacts to the creek or the associated riparian habitat. A landscaped area on the northern portion of the Project site contains a manufactured water feature

including a small pond and fountain with forced circulation and filter systems. This water feature is chemically treated on a monthly basis with chemicals including Granular Algaecide, Muriatic Acid, and Gold-n-Clear clarifier. As a result, this landscape water feature does not provide suitable or valuable species habitat and is not considered a riparian habitat. For these reasons, no impact to riparian habitat would occur.

BIO-3 *Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?*

No Impact

The Project site is located within existing urban environment, developed with industrial park uses, and contains no wetlands, Waters of the U.S., or Waters of the State. There are no sensitive or natural habitats on or adjacent to the Project site. The nearest waterway is Coyote Creek, located approximately 1.3 miles north of the site.⁹ Therefore, there would be no impact.

BIO-4 *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Less Than Significant with Mitigation Incorporated

There are no migratory wildlife corridors on or near the Project site, and no waterways that could support migratory fish species. However, nesting or migratory birds and raptors could use mature trees and isolated stands of vegetation on or near the site for nesting or foraging. The Project would largely clear the existing site (including demolition of existing structures and removal of approximately 620 trees). While 51 trees would be preserved on-site, site disturbance from construction activities and tree removal would be intensive and could interfere with the movement of migratory wildlife (avian) species using the site. The majority of the trees to be removed are landscaped trees from the existing development and approval of the tree removal would be subject to Municipal Code Section 13.32, Tree Removal Controls.

Of the 620 trees to be removed, 32 trees, including 24 ordinance-size trees, were determined to be dead or in very poor health and recommended for removal regardless of construction activities. The remaining trees proposed for removal would be within the Project's construction and/or building/improvements footprint and would require removal to support the new development.

The proposed Project would protect many of the existing native trees on-site that are healthy. These include the coast live oak, valley oak, and elderberry species. Of the 21 existing native trees on-site, the Project would keep 8. According to the Arborist Report (Appendix E) many of the native oaks are doing particularly well and will be maintained on-site. The Project site includes a 65-inch diameter, centuries old

⁹ U.S. Fish and Wildlife Service, 2022. National Wetlands Inventory, Wetlands Mapper. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed March 10, 2022.

Valley Oak tree on the east side of the property that is considered irreplaceable in the Arborist Report (Appendix E).

Thus, the removal of trees on-site could reduce or eliminate pockets of forage and cover for native nesting and/or migrating bird species known to be present in the City. Given that the Project would include the removal of trees currently located on the Project site, there is a potential nesting birds could be impacted during these activities. In conformance with the MBTA and General Plan Policy ER-5.2, the Project would implement Mitigation Measures BIO-1 and BIO-2 to avoid and minimize impacts to nesting migratory birds and raptors. The Project, with the incorporation of the following mitigation measures, would result in a less than significant impact on nesting/foraging migratory birds and raptors.

Impact BIO-1: Construction activities associated with the proposed Project would remove on-site trees, reducing pockets of forage and cover for native and/or migrating bird species, which could potentially interfere substantially with the movement of native resident species or movement of a migratory wildlife species.

Mitigation Measures

BIO-1 Tree Protection Plan

Prior to issuance of any demolition, grading, and/or building permits (whichever occurs earliest), the Project applicant shall prepare a Tree Protection Plan that identifies any on-site trees to be protected and associated protection protocol. The Tree Protection Plan shall be prepared by a certified arborist and shall consider the findings and recommendations provided in the Project Arborist Report (Appendix E of Draft EIR). Further, the Tree Protection Plan shall be consistent with relevant industry standards and best management practices, including but not limited to the International Society of Arboriculture, California Oak Foundation, and the City of San José Community Forest Management Program. The Tree Protection Plan shall be submitted to the Director of Planning, Building and Code Enforcement, or the Director' designee, for review and approval prior to issuance of any demolition, grading and/or building permits (whichever occurs earliest). The plan shall include, but not be limited to, the following:

- An exhibit identifying the location and identification numbers of on-site trees to be protected.
- Tree driplines and Tree Protection Zones (TPZs) to be maintained around each tree (or grove of trees).
- Protection measures for each development phase (e.g. pre-construction, demolition, grading, construction).
- How the construction contractor will ensure the protection measures are monitored.
- Recommendations for any on-site monitoring of construction activities by a certified arborist, as needed.
- Communication protocol in the instance that damage to on-site trees occurs during construction.
- How often and the method the construction contractor will use to report compliance on

this mitigation measure.

Implementation of the mitigations described above will reduce the impacts resulting from tree removals to less than significant level.

BIO-2 Preconstruction Bird Surveys

- **Nesting Bird Surveys:** The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive). If demolition and construction are scheduled to occur between August 31st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during Project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of breeding season (May 1st through August 31st inclusive). During this survey the qualified ornithologist shall inspect all trees and other possible nesting habitats within 250 feet of the construction areas for nests.
- **Buffer Zones:** If an active nest is found within 250 feet of the work areas to be disturbed by construction, the qualified ornithologist shall determine the extent of a construction free buffer zone to be established around the nest, (typically 250 feet for raptors and 100 feet for other birds), to ensure that raptor or migratory bird nests shall not be disturbed during Project construction. The no-disturbance shall remain in place until the ornithologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more then resumes again during the nesting season, an additional survey shall be necessary to avoid impacts to active bird nests that may be present.
- **Reporting:** If a pre-construction survey is required, prior to any tree removal and construction activities or issuance of any demolition, grading or building permits (whichever occurs first), the qualified ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning, Building and Code Enforcement or the Director's designee.

Implementation of the mitigations described above will reduce the impacts to nesting birds to less than significant level.

BIO-5 *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
Less Than Significant Impact

Within the City of San José, the urban forest as a whole is considered an important biological resource because most trees provide some nesting, cover, and foraging habitat for birds and mammals that are tolerant of humans, as well as providing necessary habitat for beneficial insects. While the urban forest is not as favorable an environment for native wildlife as extensive tracts of native vegetation, trees in the urban forest are often the best commonly or locally available habitat within urban areas. The Project is

located in an urban area and includes 671 trees within the Project site and 31 trees located adjacent to the Project site boundary with foliage that overhangs onto the Project site. The proposed Project is designed to retain existing trees and plant the maximum amount of trees on-site, as feasible, while also ensuring remnant and new trees remain healthy. The planting plans were also developed with consideration for other City and building code requirements such as low impact development, parking requirements, and onsite movement for trucks.

Of the 671 existing trees within the Project site, 598 trees, including 297 Ordinance-size trees, would be removed upon Project implementation. Of the existing trees on-site, 31 trees are native species and 12 of these existing native trees will be protected and kept on-site. Of the 31 existing trees adjacent to the Project site, 22 trees would be removed. **Table 3.2-2: Proposed Tree Removals** provides a summary of proposed removals and associated replacement requirements. Appendix E, Arborist Report provides a full inventory of trees to be removed.

Table 3.2-2: Proposed Tree Removals

Tree Size, Category	Proposed On-Site Removals	Proposed Off-Site Removals
Less than 19 inches	113	2
19 to 38 inches, non-Native	184	17
19 to 38 inches, Native	7	0
38 inches or more, non-Native	284	3
38 inches or more, Native	10	0
Total Removals	598	22

As shown in **Table 3.2-3: City of San José Tree Replacement Ratios** below, the City requires 15-gallon-size replacement trees or allows 24-inch-box trees to count as two 15-gallon-size replacement trees. If there is insufficient area on the Project site to accommodate the required replacement trees, the City allows the payment of off-site tree replacement fees to the City prior to the issuance of building permit(s), in accordance with the City Council approved Fee Resolution in effect at the time of payment. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites. Since 620 trees would be removed, based on the City's Tree Replacement ratios, the Project would be required to replant a total of 1,736 15-gallon replacement trees (or 868 24-inch box trees) to comply with the City's Tree Replacement Ratio.

The proposed Project would plant 339 24-inch box trees throughout the Project site, which would be equivalent to 678 15-gallon replacement trees. The species of trees to be planted would be determined in consultation with the City Arborist and the Department of Planning, Building and Code Enforcement. The proposed replacement trees, in addition to the 51 existing trees to remain on-site, would result in a total of 390 trees on-site upon Project implementation. Due to site-constraints, such as available area within which to plant, replanting the entire replacement tree amount would not be feasible. Therefore, Project implementation would result in a net reduction of 312 trees. However, the Project would comply with City Standard Permit Conditions which allow for payment of in-lieu fees to ensure that the removal of the 620 trees would be less than significant. Further, the Project would not conflict with or impede implementation of the City of San José Community Forest Management Plan. The concept of a community forest allows the City to think holistically about trees and other vegetation found within the City. As noted

in the City Of San José Community Forest Management Plan, the human-created community forest was planted in a setting that is distinguished by paved surfaces and compromised soils that do not support the natural growth and regeneration of trees. Trees in the community forest must also be managed to safely interact with people, buildings, and infrastructure. The proposed Project would improve the quality of on-site canopy and the health of on-site trees through planting of native species and improvements to landscaping and maintenance. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. A less than significant impact would occur.

Standard Permit Condition

Tree Replacement. Trees removed for the Project shall be replaced at ratios required by the City, as stated in **Table 3.2-3: City of San José Tree Replacement Ratios** below, as amended:

Table 3.2-3: City of San José Tree Replacement Ratios

Circumference of Tree to be removed	Replacement Ratios Based on Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
38 inches or more	5:1	4:1	3:1	15-gallon
19 up to 38 inches	3:1	2:1	None	15-gallon
Less than 19 inches	1:1	1:1	None	15-gallon

*x:x = tree replacement to tree loss ratio
 Note: Trees greater than or equal to 38-inch circumference measured at 54 inches above natural grade shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees. For Multifamily residential, Commercial, and Industrial properties, a permit is required for removal of trees of any size.
 A 38-inch tree equals 12.1 inches in diameter.
 **A 24-inch box replacement tree = two 15-gallon replacement trees
 Single Family and Two-dwelling properties may replace trees at a ratio of 1:1.

620 trees would be removed and 51 existing trees would remain. Of the proposed tree removals, 115 trees would be replaced at a 1:1 ratio, 201 trees would be replaced at a 2:1 ratio, 7 trees would be replaced at a 3:1 ratio, 287 trees would be replaced at a 4:1 ratio, and the remaining 10 trees would be replaced at a 5:1 ratio. The total number and size of replacement trees required to be planted is 1,736 15-gallon trees. The proposed Project would plant 339 24-inch box trees throughout the Project site, which would be equivalent to 678 15-gallon replacement trees. Due to site constraints, replanting of the remaining 1,058 replacement trees would not be feasible given the insufficient area to plant the replacement trees. The permittee would be subject to payment of Off-Site Tree Replacement Fees to the City for 1,058 replacement trees that could not be planted on-site because of insufficient area.

- Prior to the issuance of building permit(s), the permittee shall pay Off-Site Tree Replacement Fee(s) to the City for 1,058 off-site replacement trees in accordance with the City Council approved Fee Resolution in effect at the time of payment.

BIO-6

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

Less Than Significant Impact

While the Project site is located within the Santa Clara Valley Habitat Plan (SCVHP) study area, the site is designated as ‘Urban Areas’ and is not designated as a natural community area or identified as an important habitat for endangered and threatened species.¹⁰ Further, the Project site has been developed since the 1970s and does not contain native vegetation communities.

According to the City General Plan EIR, the USFWS has indicated concerns regarding nitrogen deposition from air pollution that can affect plant composition in serpentine grasslands and the bay checkerspot butterfly in south Santa Clara County area. All major remaining populations of the butterfly and many of the sensitive serpentine plant populations occur in areas subject to air pollution from vehicle exhaust and other sources throughout the Bay Area including the Project area. Because serpentine soils tend to be nutrient poor, and nitrogen deposition artificially fertilizes serpentine soils, nitrogen deposition facilitates the spread of invasive plant species. The displacement of these species, and subsequent decline of several federally – listed species, including the butterfly and its larval host plants, has been documented on Coyote Ridge in central Santa Clara County. Nitrogen tends to be efficiently recycled by the plants and microbes in infertile soils such as those derived from serpentine, so that fertilization impacts could persist for years and result in cumulative habitat degradation. Impacts of nitrogen deposition upon serpentine habitat and the Bay checkerspot butterfly can be correlated to the amount of new vehicle trips that a project is expected to generate. Fees collected under the SCVHP for new vehicle trips can be used to purchase conservation land for the Bay checkerspot butterfly.

The Project would not impact any SVHP covered species, and would therefore not conflict with the provisions of SCVHP. Cumulative impacts of development Citywide and within the areas of Santa Clara County covered by the Habitat Plan would be offset through conservation and management of land for the Bay checkerspot butterfly. As such, the Project would be required to implement the following Standard Permit Condition. With implementation of the following Standard Permit Condition, the Project would not conflict with the provisions of the SCVHP and impacts would be less than significant in this regard.

Standard Permit Condition

Santa Clara Valley Habitat Plan. The proposed Project may be subject to applicable SCVHP conditions and fees (including the nitrogen deposition fee) prior to issuance of any grading permits. The Project applicant shall submit the Santa Clara Valley Habitat Plan Coverage Screening Form (<https://www.scv-habitatagency.org/DocumentCenter/View/151/Coverage-Screening-Form?bidId=>) to the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee for approval and payment of

¹⁰ Santa Clara Valley Habitat Agency, 2022. SCVHP Geobrowser. Available at <http://www.hcpmaps.com/habitat/>. Accessed June 2, 2022.

all applicable fees prior to the issuance of a grading permit. The Habitat Plan and supporting materials can be viewed at <https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan>.

3.3 CULTURAL RESOURCES

The cultural resources evaluation is based on the following, which are included as Appendix E of this Draft EIR:

- Paleontological Resources Assessment prepared by LSA Associates, Inc. (November 2021), and
- Cultural Resources Study prepared by LSA Associates, Inc. (December 2021).

The Cultural Resources Study prepared by LSA Associates, Inc. includes archival and records searches from:

- Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University
- The *California Inventory of Historic Resources* (California Office of Historic Preservation 1976);
- *Five Views: An Ethnic Historic Site Survey for California* (California Office of Historic Preservation 1988);
- *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- *California Historical Landmarks* (California Office of Historic Preservation 2021); and
- *Built Environment Resource Directory for Santa Clara County* (California Office of Historic Preservation 2021b).

ENVIRONMENTAL SETTING

ARCHAEOLOGICAL RESOURCES

The Cultural Resources Study did not identify any known or recorded archeological resources within the Project site. Geologic mapping of the northern Santa Clara Valley show two surficial deposits in the Project site: Holocene-age alluvial fan levee deposits (Qhl) along the historical intermittent stream channel bisecting the southern end of the Project site, and Holocene-age alluvial fan deposits (Qhf) in the remainder of the Project site. Based on the age and distribution of these surface deposits and proximity to the historical-period stream, areas of sensitivity for buried precontact archaeological resources are identified within the Project site. In the area with Holocene alluvial fan levee deposits (Qhl) in the southern half of the Project site, there is high potential for buried sites to be present. For the remainder of the Project site, sitting on Holocene alluvial fan deposits (Qhf), there is moderate buried site potential.

HISTORIC RESOURCES

The Project site is located within the City's International Business Park District, a late 20th century commercial and light-industrial planned development. The Project site is developed with three industrial buildings, all of which are less than 45 years of age. None of the structures on-site are listed in the National Register of Historic Places or the California Register of Historical Resources. Further, the structures on-site are not eligible for inclusion in the San José Historic Resources Inventory as individual City Landmark(s), Structure(s) of Merit, or Identified Site/Structure or as Contributing Structure(s) to a potential historic district. Therefore, the Project site and existing development do not qualify as a historic resource for the purposes of CEQA (as defined by Public Resources Code Section 21084.1). A brief architectural description

of all the properties located in the Project site is provided below and is included in Appendix E of the Draft EIR.

REGULATORY FRAMEWORK

FEDERAL AND STATE

National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's most comprehensive list of historic resources and includes historic resources significant in American history, architecture, archeology, engineering and culture, at the local, State and National level. The NRHP is administered by the National Park Service and includes buildings, structures, sites, objects, and districts. Historic properties are nominated to the NRHP by the State Historic Preservation Officer (SHPO) of the state in which the property is located. Any person or agency can propose a nomination, but a nomination must be processed through SHPO.

The NRHP identifies four possible context types or criteria, at least one of which must be applicable at the National, State, or local level. These criteria are:

- Criterion A: Property is associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: Property is associated with the lives of persons significant in our past.
- Criterion C: Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- Criterion D: Property has yielded, or is likely to yield, information important to prehistory or history.

Secretary of the Interior's Standards for the Treatment of Historic Properties

The 1995 Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) outlines specific standards and guidelines for the preservation, rehabilitation, restoration, and reconstruction of historic properties. Each set of standards provides specific recommendations for the proper treatment of specific building materials, as well as parts of building construction. CEQA references these standards relative to consideration of the significance of project impacts, or lack thereof, on historic resources. The Standards are also referenced in the Envision San José 2040 General Plan and the General Plan EIR.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) serves as a guide to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change (Pub. Res. Code [PRC] § 5024.1(a)), and it is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. A historical resource is any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or which is significant in the architectural, engineering,

scientific, economic, agricultural, educational, social, political, military, or cultural history of California (14 California Code of Regulations [CCR]). The criteria in which to establish significant of a property for listing on the CRHR is like the NRHP but with a greater emphasis on local and state significance.

The context types or criteria to be used when establishing the significance of a property for listing on the CRHR are very similar, with emphasis on local and State significance. They are:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.

LOCAL

City of San José Historic Resources

The City of San José Historic Resources Inventory classifies a property's status as one or more of the following categories defined in the Historic Resources Inventory itself, the City of San José Historic Preservation Ordinance, and the 2040 General Plan, and the inventory classifications of the local Historic Resources Inventory.

- **City Landmark Site/Structure** (CLS, defined in the City of San José Historic Preservation Ordinance): An individual historic site or structure locally designated by the City Council as a City Landmark under Municipal Code Section 13.48.
- **Candidate City Landmark** (CCL, defined in the City of San José Historic Preservation Ordinance): An individual site or structure found to be eligible for City Landmark status by meeting the criteria under Municipal Code Section 13.48 based on an evaluation or survey work.
- **City Landmark District** (CLD, defined in the City of San José Historic Preservation Ordinance): A historic district locally designated by the City Council as a City Landmark District under Municipal Code Section 13.48.
- **Candidate City Landmark District** A grouping of structures found to be eligible for City Landmark District status by meeting the criteria under Municipal Code Section 13.48 based on an evaluation or survey work.
- **National Register Site/Structure** (NRS, defined in the City of San José Historic Preservation Ordinance): A structure that has been listed on the NRHP by the State HPO.
- **National Register Historic District** (NRD, defined in the City of San José Historic Preservation Ordinance): A grouping of structures that has been listed on the NRHP by the State HPO.

- **Eligible for National Register (Individually)** (ENR, defined in the City of San José Historic Preservation Ordinance): A structure that has been found to be eligible for listing on the NRHP, but has not yet been listed on the NRHP by the State HPO.
- **Eligible for National Register Historic District** (ENRD, defined in the City of San José Historic Preservation Ordinance): A grouping of structures that has been found to be eligible for listing on the NRHP, but has not yet been listed on the NRHP by the State HPO.
- **State Landmark** (SL, defined in the City of San José Historic Preservation Ordinance): Buildings, structures, sites, or places that have been determined to have statewide historical significance by the State Historical Resources Commission and the Director of California State Parks.
- **California Register Site/Structure** (CR, defined in the City of San José Historic Preservation Ordinance): A structure or site that has been listed on the CRHR.
- **Eligible for California Register (Individually)** (ECR, defined in the City of San José Historic Preservation Ordinance): A structure or site that is eligible for listing the CRHR, but has not yet been listed on the CRHR.
- **Eligible for California Register District** (ECDR, defined in the City of San José Historic Preservation Ordinance): A grouping of structures or sites that is eligible for listing on the CRHR, but has not yet been listed on the CRHR.
- **City Conservation Area** (CNS, defined in the City of San José Historic Preservation Ordinance): A historic area designated by the City Council as a Conservation Area under Municipal Code Section 13.48.
- **Contributing Site/Structure** (CS, a Classification of the Historic Resources Inventory): A site or structure that contributes to a theme, a geographical area, a property type, or to the historic fabric of the community and in some cases to a certain neighborhood.
- **Non-Contributing Site/Structure** (NCS, a Classification of the Historic Resources Inventory): A site or structure within a designated or eligible historic area that does not qualify as a Contributing Site/Structure.
- **Structure of Merit** (SM, defined in the San José 2040 General Plan): An important historic property or feature of lesser significance, and that does not qualify as a City Landmark or for the California or National Registers but attempts should be made for preservation to the extent feasible under the 2040 General Plan goals and policies.
- **Identified Site/Structure** (IS, a Classification on the Historic Resources Inventory): A potential historic property that could qualify under one or more of the classifications above pending further evaluation and survey work.

A City Landmark Site/Structure, Candidate City Landmark Site/Structure, City Landmark Historic District , and/or Candidate City Landmark Historic District, including Contributing Site/Structure within a City Landmark District or Candidate City Landmark District is considered a historical resource under CEQA. A Candidate City Landmark or Candidate City Landmark District is considered a historical resource under

CEQA because it meets the criteria for local designation under the Historic Preservation Ordinance. An Identified Site/Structure may also be a historical resource under CEQA if a historic resource evaluation presents a preponderance of evidence that the identified property meets federal, state and/or local designation criteria. Conservation Areas and Structures of Merit are not considered historical resources under CEQA.

Chapter 13.48 of the San José Municipal Code is designed to promote the public peace, health, safety and welfare through the preservation of landmarks and districts and thereby stabilize neighborhoods and areas of the city; enhance, preserve and increase property values; carry out the goals and policies of the city's general plan, increase cultural, economic and aesthetic benefits to the city and its residents; preserve, continue and encourage the development of the city to reflect its historical, architectural, cultural, and aesthetic value or tradition; protect and enhance the city's cultural and aesthetic heritage; and promote and encourage continued private ownership and utilization of such structures.

In accordance with the City of San José's Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code), a resource qualifies as a City Landmark (including City Landmark District) if it has "special historical, architectural, cultural, aesthetic or engineering interest or value of an historic nature" and is one of the following resource types:

1. An individual structure or portion thereof;
2. An integrated group of structures on a single lot;
3. A site, or portion thereof; or
4. Any combination thereof (Section 13.48.020 C).

The ordinance defines the term "historical, architectural, cultural, aesthetic, or engineering interest or value of an historic nature" as deriving from, based on, or related to any of the following factors:

1. Identification or association with persons, eras or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;
2. Identification as, or association with, a distinctive, significant or important work or vestige:
 - a. Of an architectural style, design or method of construction;
 - b. Of a master architect, builder, artist or craftsman;
 - c. Of high artistic merit;
 - d. The totality of which comprises a distinctive, significant or important work or vestige whose component parts may lack the same attributes;
 - e. That has yielded or is substantially likely to yield information of value about history, architecture, engineering, culture or aesthetics, or that provides for existing and future generations an example of the physical surroundings in which past generations lived or worked; or
 - f. That the construction materials or engineering methods used in the proposed landmark are unusual or significant of uniquely effective.

3. The factor of age alone does not necessarily confer a special historical, architectural, cultural, aesthetic, or engineering significance, value or interest upon a structure or site, but it may have such effect if a more distinctive, significant or important example thereof no longer exists (Section 13.48.020 A).

The City of San José's Municipal Code Section 13.48.110 (H) sets forth factors that may be considered to determine whether a property qualifies as a local landmark (including a historic district), and these include:

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

The ordinance also provides a designation of a City Landmark District: "a geographically definable area of urban or rural character, possessing a significant concentration or continuity of site, building, structures or objects unified by past events or aesthetically by plan or physical development (Section 13.48.020 B).

Envision San José 2040 General Plan

The *Envision San José 2040 General Plan* includes policies applicable to all development projects in San José. The following policies are specific to cultural resources and are applicable to the Project.

Policy LU-13.15: Implement City, State, and Federal historic preservation laws, regulations, and codes to ensure the adequate protection of historic resources.

Archaeology and Paleontology

Policy ER-10.1: For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.2: Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until

professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced

Policy ER-10.3: Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a cultural resources impact is considered significant if the Project would:

1. Cause a substantial adverse change in the significance of a historical resource, pursuant to in §15064.5?
2. Cause a substantial adverse change in the significance of an archaeological resource, pursuant to § 15064.5?
3. Disturb any human remains, including those interred outside of formal cemeteries?

The definition of “historical resources” is provided by CEQA Guidelines § 15064.5(a). The following is an abbreviated and excerpted summary of this definition:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in, the CRHR.
2. A resource included in a local register of historical resources or identified as significant in an historical resource survey shall be presumed historically significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR.

Under CEQA, a structure need not be listed on a national, state, or local register to qualify as a significant resource. A structure is considered a resource under CEQA if it is found to be *eligible* for inclusion on a national, state, or local register. The following impact analysis evaluates the Project’s potential to result in cultural resource impacts.

CUL-1 ***Would the proposed Project, cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?***
Less Than Significant Impact

The Project site is currently developed with three existing industrial buildings constructed between 1979 to 1984. The buildings are all less than 45 years of age and they are not eligible historical resources on the local, State, or National level.

The Project site is located within the City of San José's International Business Park, a commercial and light-industrial planned development covering 375 acres in northeastern San José. The International Business Park is a built environment resource common in San José, Santa Clara County, Silicon Valley, and industrial/research and development areas through California. The existing buildings possess several characteristics of a general Modernist-influenced utilitarian building type associated with late-20th century development. These buildings do not possess specific, important associations with the City's late-20th century growth. For these reasons, the Project site is not considered significant under CRHR Criterion 1.

Background research did not identify the architect(s) or builder(s) responsible for designing and constructing the buildings in the Project site. Background research identified previous owners of the buildings in the Project site. However, the individuals themselves or their representative groups (investment groups, holding companies, life insurance companies, and so on) would not have lived within the Project site, as these buildings were used for commercial and light-industrial purposes. Accordingly, their potential associations with the Project site was secondary and primarily served to generate income from rents, leases, or manufacturing and sales of merchandise by owner operators. Accordingly, these buildings do not appear associated with the lives of individuals important to the history of San José, Santa Clara County, or California. For these reasons, the Project site does not appear significant under CRHR Criterion 2.

The Project site contains representative examples of a general Modernist influenced utilitarian commercial or light industrial building type associated with mid- to late-20th century development in San José, Santa Clara County, and California. A review of popular architectural guides of the Bay Area and a database of West Coast architect biographies did not indicate that the Project site is notable for its individual or collective architectural or design qualities or as an important example of an architectural aesthetic. The portion of the International Business Park District that includes the Project site shows evidence of modification, which is common to these building types that subsequent owners modify for new uses, expansion, upgrades, or repair damage. For these reasons, the Project site does not appear significant under CRHR Criterion 3.

CRHR Criterion 4 provides the means to evaluate the potential for archaeological deposits to contain information important in San José's historic-period and precontact past. Its application to architecture and the built environment is less common in eligibility evaluations due to modern written sources, plans, and other forms of technical analysis. Information about its general Modernist-influenced utilitarian architectural aesthetic and construction methods, as represented by existing buildings on the Project site, can be obtained from other widely available sources on this and other common architectural styles. For these reasons, the Project site is not significant under CRHR Criterion 4.

The Project site is near similar commercial and light-industrial properties to the north along Qume Drive and south along Lundy Avenue. Maps and aerial photographs depict the portion of the International Business Park District within the Project vicinity extend west through San José and other cities within Santa

Clara County. These properties were developed around the same time as the Project site and share architectural styles and building types.

Therefore, project implementation would not have the potential to impact on or off-site historic resources.

CUL-2 ***Would the proposed Project, cause a substantial adverse change in the significance of an archaeological resource pursuant to in §15064.5?***
Less Than Significant with Mitigation Incorporated

Previously unknown, unrecorded archeological resources could be discovered during the ground disturbing construction operations. As discussed above, the records search revealed no previously recorded archeological resources in the Project site and no archaeological resources were identified as part of the Cultural Resources Study completed for the Project. However, a review of literature and maps did indicate a moderate to high potential of historic-period activity within the Project area for unrecorded historic-period archeological resources in the proposed Project area; see **Figure 3.3-1: Areas of Archeological Sensitivity**.

The General Plan EIR concluded that future development and redevelopment allowed under the proposed General Plan, especially construction activities, could result in direct or indirect impacts to both prehistoric and historic archaeological resources. The General Plan includes policies [Policy ER-10.1, Policy ER-10.2, Policy ER-10.3] that require the provision of studies to identify possible archaeological resources on specific development sites and the incorporation of measures to avoid or limit possible disturbance of resources if they are accidentally encountered during construction. In the event that archaeological resources (including human remains) are encountered during excavation and construction, the Project would implement the following Mitigation Measures and Standard Permit Conditions:

Impact CUL-1: Construction activities on the Project site could potentially result in the disturbance of an archaeological resource pursuant to § 15064.5.

Mitigation Measures

CUL-1 Treatment Plan

If recommended by a qualified archaeologist pursuant to the Subsurface Cultural Resources Standard Permit Condition, the Project applicant shall prepare a treatment plan that reflects permit-level detail pertaining to depths and locations of excavation activities. The treatment plan shall be prepared and submitted to the Director of the City of San José Department of Planning, Building, and Code Enforcement or Director's designee prior to approval of any grading permits. The treatment plan shall contain, at a minimum:

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

- iii. Monitoring schedules and individuals
- iv. Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- v. Detailed field strategy to record, recover, or avoid the finds and address research goals.
- vi. Analytical methods.
- vii. Report structure and outline of document contents.
- viii. Disposition of the artifacts.
- ix. Security approaches or protocols for finds.
- x. Appendices: all site records, correspondence, and consultation with Native Americans, etc. Implementation of the plan, by a qualified archaeologist, shall be required prior to the issuance of any grading permits. The treatment plan shall utilize data recovery methods to reduce impacts on subsurface resources.

CUL-2 Evaluation

The Project applicant shall notify the Director of the City of San José Department of Planning, Building, and Code Enforcement or Director's designee of any finds during the preliminary field investigation, grading, or other construction activities. Any historic or prehistoric material identified in the Project area during the preliminary field investigation and during excavation activities shall be evaluated for eligibility for listing in the California Register of Historic Resources as determined by the California Office of Historic Preservation. Data recovery methods may include, but are not limited to, backhoe trenching, shovel test units, hand augering, and hand-excavation. The techniques used for data recovery shall follow the protocols identified in the approved treatment plan. Data recovery shall include excavation and exposure of features, field documentation, and recordation. All documentation and recordation shall be submitted to the Northwest Information Center and Native American Heritage Commission (NAHC) Sacred Land Files, and/or equivalent prior to the issuance of an occupancy permit. A copy of the evaluation shall be submitted to the City of San José Department of Planning, Building, and Code Enforcement or Director's designee.

Implementation of the mitigations described above will reduce the impacts to archaeological resource resulting from construction activities at the site.

In the unlikely event that archaeological resources (including human remains) are encountered during excavation and construction, the Project would also be required to implement the following Standard Permit Conditions:

Standard Permit Conditions

Subsurface Cultural Resources. If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist in consultation with a Native American

representative registered with the Native American Heritage Commission for the City of San José and that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3 shall examine the find. The archaeologist in consultation with the Tribal representative shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

Human Remains. If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Project applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- i. The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- ii. The MLD identified fails to make a recommendation; or
- iii. The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Following implementation of Mitigation Measures CUL-1 through CUL-2 and the Standard Permit Conditions, the Project would result in less than significant impacts to archaeological resources.

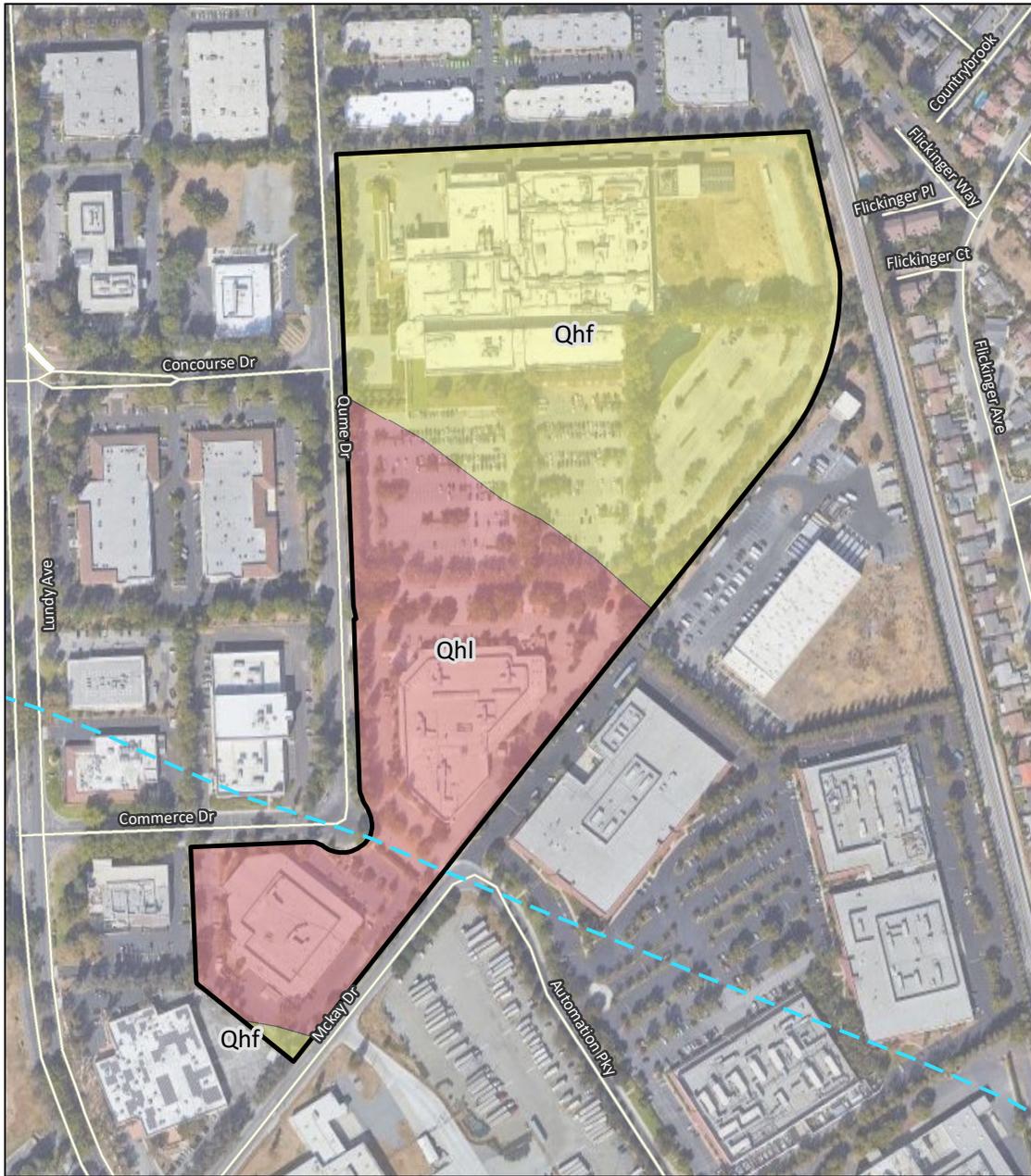
CUL-3 *Would the proposed Project, disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant Impact

Based on review of the General Plan EIR, there are no known prehistoric or historic-era marked or unmarked human interments are present within or in the immediate vicinity of the Project site. However, there is the potential for unmarked, previously unknown Native American or other graves to be present and uncovered during construction activities. California law recognizes the need to protect historic-era

and Native American human burials, skeletal remains, and grave-associated items from vandalism and inadvertent destruction and any substantial change to or destruction if these resources would be a significant impact. Therefore the City, would require the Project to comply will all applicable regulatory programs pertaining to subsurface cultural resources including the Standard Permit Conditions listed above for avoiding and reducing impacts if human remains are encountered.

With implementation of the Standard Permit Conditions, a less than significant impact would occur.



LEGEND

Project Site

Historical Intermittent Stream

Geology

Holocene alluvial fan levee deposits (Qhl):
High Archaeological Sensitivity

Holocene alluvial fan deposits (Qhf):
Moderate Archaeological Sensitivity

Source: LSA, 2021

Figure 3.3-1: Areas of Archaeological Sensitivity



Not to scale

3.4 GREENHOUSE GAS EMISSIONS

A Greenhouse Gas Emissions Assessment and Greenhouse Gas Compliance Checklist have been prepared by Kimley-Horn, Inc. (June 2022) to address potential impacts to Greenhouse Gas Emissions (GHG) associated with implementation of the proposed Project. The following discussion is based on the Greenhouse Gas Emissions Assessment and the report is included as Appendix F of this Draft EIR.

ENVIRONMENTAL SETTING

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (Intergovernmental Panel on Climate Change, 2013).

REGULATORY FRAMEWORK

FEDERAL AND STATE

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions

reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence, it was found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the George W. Bush Administration issued Executive Order 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 – 2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 – 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 – 2021, and NHTSA intends to set standards for model years 2022 – 2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years

2022 – 2025 cars and light trucks. It should be noted that the EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 – 2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baseline.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2018, the EPA stated their intent to halt various Federal regulatory activities to reduce GHG emissions, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. On September 27, 2019, the EPA and the NHTSA published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.” (84 Fed. Reg. 51,310 (Sept. 27, 2019.)) The Part One Rule revokes California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The U.S. EPA is currently reconsidering the SAFE rule.

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California’s contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂e in the world and produced 440 million gross metric tons of CO₂e in 2015. In the state, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32 California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major legislation related to GHG emissions reduction.

Assembly Bill (AB) 32 – The California Global Warming Solutions Act of 2006

California AB 32 was signed into law in September 2006. The bill requires statewide reductions of GHG emissions to 1990 levels by 2020 and the adoption of rules and regulations to achieve the most technologically feasible and cost-effective GHG emissions reductions.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California’s GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as “business-as-usual”). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the state’s Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California’s GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing state laws and policies, including California’s clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of California’s long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California’s transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California’s freight transport system is essential to supporting the State’s economic development in coming decades while reducing pollution.
- CARB’s Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from

transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing zero emissions (ZE) buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated considering current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated state-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. By 2016, California had reduced GHG emissions below 1990 levels, achieving AB 32's 2020 goal four years ahead of schedule.

In January 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB, 2017). The Second Update sets forth CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The Second Update was approved by CARB's Governing Board on December 14, 2017.

Assembly Bill 1493

AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State."

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. When fully phased in, the near-term standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards will result in a reduction of about 30 percent.

Senate Bill 375 – Sustainable Communities and Climate Protection Act

SB 375 encourages housing and transportation planning on a regional scale in a manner designed to reduce vehicle use and associated GHG emissions. The bill requires the California Air Resources Board (CARB) to set regional targets for the purpose of reducing GHG emissions from passenger vehicles for 2020 and 2035. Per SB 375, CARB appointed a Regional Targets Advisory Committee on January 23, 2009 to provide recommendations on factors to be considered and methodologies to be used in CARB’s target setting process. The per capita reduction targets set for passenger vehicles in the San Francisco Bay Area are a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Senate Bills 1078 and Senate Bill X1-2

SB 1078 required California to generate 20 percent of its electricity from renewable energy by 2017. This goal was accelerated with SB 107, which changed the due date to 2010 instead of 2017. On November 17, 2008, Executive Order S-14-08 established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the state’s load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SB X1-2 codified the 33 percent by 2020 goal.

Senate Bill 1368

SB 1368 (Chapter 598, Statutes of 2006) is the companion bill of AB 32 and was signed into law in September 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007. SB 1368 also required the CEC to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas fired plant. Furthermore, the legislation states that all electricity provided to California, including imported electricity, must be generated by plants that meet the standards set by CPUC and CEC.

Senate Bill 32

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

Senate Bill 100 (California Renewables Portfolio Standards Program: Emissions of Greenhouse Gases)

Signed into Law in September 2018, SB 100 increased California’s renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

SB 350 (Clean Energy and Pollution Reduction Act of 2015).

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 45 percent by 2027) and to double

the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms).

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans).

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

Executive Order S-3-05

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07

Issued on January 18, 2007, Executive Order S-01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08

Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08

Issued on November 17, 2008, Executive Order S-14-08 expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the state come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09

Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15

Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the state's climate adaptation plan to be updated every three years and for the state to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18

Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat, even with rapid population growth.

Title 20 Appliance Efficiency Regulations

The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and took effect on January 1, 2020. Under the 2019 standards, residential dwellings are required to use approximately 53 percent less energy and nonresidential buildings are required to use approximately 30 percent less energy than buildings under the 2016 standards. The latest 2022 Standards were adopted in August 2021 and will go into effect in January 2023. The updated 2022 Standards provide further reductions over the 2019 Standards.

Title 24 California Green Building Standards Code

The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as CALGreen, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and nonresidential buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The latest CALGreen Code took effect on January 1, 2020 (2019 CALGreen). The 2019 CALGreen standards will continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The new 2019 CALGreen standards require residential buildings are required to be solar ready through solar panels (refer to Section 110.10 in the 2019 Building Energy Efficiency Standards for more details).

REGIONAL***Bay Area Air Quality Management District Thresholds***

The BAAQMD is the regional agency with jurisdiction over the nine-county region located in the Basin. The Association of Bay Area Governments (ABAG), Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various nongovernmental organizations also join in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs.

Under CEQA, the BAAQMD is a commenting responsible agency on air quality within its jurisdiction or impacting its jurisdiction. The BAAQMD reviews projects to ensure that they would: (1) support the primary goals of the latest Air Quality Plan; (2) include applicable control measures from the Air Quality Plan; and (3) not disrupt or hinder implementation of any Air Quality Plan control measures.

In May 2010, the BAAQMD adopted its updated California Environmental Quality Act (CEQA) Air Quality Guidelines as a guidance document to provide lead government agencies, consultants, and project proponents with uniform procedures for assessing air quality impacts and preparing the air quality sections of environmental documents for projects subject to CEQA. The BAAQMD CEQA Guidelines include methodologies and thresholds for addressing project and program level air quality and GHG emissions. The Guidelines were called into question by an order issued March 5, 2012, in California Building Industry Association (CBIA) v. BAAQMD (Alameda Superior Court Case No. RGI0548693). The Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds. The court also issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD had complied with CEQA. Notably, the court's ruling was based solely on BAAQMD's failure to comply with CEQA. The court did not reach any issues relating to the validity of the scientific reasoning underlying the recommended significance thresholds.

In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds. CBIA sought review by the California Supreme Court on three issues, including the appellate court's decision to uphold the BAAQMD's adoption of the thresholds, and the Court granted review on just one: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users of a proposed project? In December 2015, the California Supreme Court confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. The BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The BAAQMD is currently working to revise any outdated information in the Guidelines as part of its update to the CEQA Guidelines and thresholds of significance. In April 2022, new CEQA thresholds for evaluating climate impacts from land use projects and plans were approved.

BAAQMD's Thresholds for Land Use Projects (Must Include A or B):

A. Projects must include, at a minimum, the following project design elements:

1. Buildings

- a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation

- a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's

Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

- i. Residential projects: 15 percent below the existing VMT per capita
 - ii. Office projects: 15 percent below the existing VMT per employee
 - iii. Retail projects: no net increase in existing VMT
- b. Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- B. Be consistent with a local GHG Reduction Strategy that meets the criteria under the CEQA Guidelines section 15183.5(b)C

A qualified GHG Reduction Strategy adopted by a local jurisdiction should include the following elements as described in the State CEQA Guidelines Section 15183.5(b)(1):

- i. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- ii. Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- iii. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- iv. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- v. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- vi. Be adopted in a public process following environmental review

It should be noted that the BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, the BAAQMD recommends quantification and disclosure of construction GHG emissions. The BAAQMD also recommends that the Lead Agency should make a determination on the significance of these construction generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. The Lead Agency is encouraged to incorporate best management practices to reduce GHG emissions during construction, as feasible and applicable.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM₁₀ standard). The 2017 Clean Air Plan: Spare the Air, Cool the Climate was adopted on April 19, 2019, by the BAAQMD.

The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAQMD will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution

among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

LOCAL

City of San José Municipal Code

The City’s Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Regulations for Private Development (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

City of San José General Plan

The General Plan includes a GHG Reduction Strategy that is designed to help the City sustain its natural resources, grow efficiently, and meet California legal requirements for GHG emissions reduction. Multiple policies and actions in the General Plan have GHG implications including those targeting land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The policies also include a monitoring component that allows for adaptation and adjustment of City programs and initiatives related to sustainability and associated reductions in GHG emissions. The GHG Reduction Strategy is intended to meet the mandates as outlined in the CEQA Guidelines and the recent standards for “qualified plans” as set forth by BAAQMD.

The GHG Reduction Strategy was re-adopted by the San José City Council in December 2015. The environmental impacts of the GHG Reduction Strategy were analyzed in the General Plan FPEIR and a 2015 Supplement to the General Plan FPEIR. The City’s projected emissions and the GHG Reduction Strategy are consistent with the measures necessary to meet state-wide 2020 goals established by AB 32 and addressed in the Climate Change Scoping Plan. Measures have not been identified that would ensure GHG emissions would be consistent with state-wide 2050 goals; however, the City adopted overriding considerations for identified future impacts associated with buildout of the City’s General Plan.

The General Plan includes the following GHG reduction policies, which are applicable to the Project. These policies are also described within the City’s GHG Reduction Strategy.

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- Policy MS – 1.1 Demonstrate leadership in the development and implementation of green building policies and practices. Ensure that all projects are consistent with or exceed the City's Green Building Ordinance and City Council Policies as well as State and/or regional policies which require that projects incorporate various green building principles into their design and construction.
- Policy MS – 1.4: Foster awareness of San José's business and residential communities of the economic and environmental benefits of green building practices. Encourage design and construction of environmentally responsible commercial and residential buildings that are also operated and maintained to reduce waste, conserve water, and meet other environmental objectives.
- Policy MS-2.3: Encourage consideration of solar orientation, including building placement, landscaping, design, and construction techniques for new construction to minimize energy consumption.
- Policy MS – 2.6: Promote roofing design and surface treatments that reduce the heat island effect of new and existing development and support reduced energy use, reduced air pollution, and a healthy urban forest. Connect businesses and residents with cool roof rebate programs through City outreach efforts.
- Policy MS-2.11: Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on-sites to maximize the effectiveness of passive solar design).
- Policy MS – 5.5: Maximize recycling and composting from all residents, businesses, and institutions in the City.
- Policy MS – 5.6: Enhance the construction and demolition debris recycling program to increase diversion from the building sector.
- Policy MS-14.4: Implement the City's Green Building Policies so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.
- Policy MS – 21.2: Manage the Community Forest to achieve San José's environmental goals for water and energy conservation, wildlife habitat preservation, stormwater retention, heat reduction in urban areas, energy conservation, and the removal of carbon dioxide from the atmosphere.
- Policy CD-2.10: Recognize that finite land area exists for development and that density supports retail vitality and transit ridership. Use land regulations to require compact, low-impact

development that efficiently uses land planned for growth, particularly for residential development which tends to have a long life-span. Strongly discourage small-lot and single-family detached residential product types in growth areas.

- Policy CD-2.11: Within the Downtown and Urban Village Overlay areas, consistent with the minimum density requirements of the pertaining Land Use/Transportation Diagram designation, avoid the construction of surface parking lots except as an interim use, so that long-term development of the site will result in a cohesive urban form. In these areas, whenever possible, use structured parking, rather than surface parking, to fulfill parking requirements. Encourage the incorporation of alternative uses, such as parks, above parking structures.
- Policy CD-3.2: Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant anticipated future increases in bicycle and pedestrian activity.
- Policy CD-5.1: Design areas to promote pedestrian and bicycle movements and to facilitate interaction between community members and to strengthen the sense of community.
- Policy LU-5.4: Require new commercial development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections; and including secure and convenient bike storage.
- Policy TR – 1.16: Develop a strategy to construct a network of public and private alternative fuel vehicle charging/fueling stations city wide. Revise parking standards to require the installation of electric charging infrastructure at new large employment sites and large, multiple family residential developments.
- Policy TR-2.18: Provide bicycle storage facilities as identified in the Bicycle Master Plan.
- Policy TR-3.3: As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.

City of San José Greenhouse Gas Reduction Strategy

The City of San José adopted its 2030 Greenhouse Gas Reduction Strategy (GHGRS), in November 2020, consistent with SB 32. SB 23 has established an interim statewide greenhouse gas reduction goal for 2030 to meet the long-term target of carbon neutrality by 2045 (EO B-55-18). SB 32 expands upon AB 32, the Global Warming Solutions Act of 2006, and requires a reduction in greenhouse gas emissions of at least 40% below the 1990 levels by 2030.

The 2030 GHGRS allows for tiering and streamlining of GHG analyses under CEQA because it serves as a qualified Climate Action Plan for the City of San José. The GHGRS was prepared under the BAAQMD CEQA

Guidelines, and particularly in conformance with CEQA Guidelines Section 15183.5, which specifically addresses the development of GHG Reduction Plans for tiering and streamlining GHG analysis under CEQA. The 2030 GHGRS identifies major General Plan strategies and policies to be implemented by development project such as green building practices, transportation strategies, energy use, water conservation, waste reduction and diversion, and other sectors that contribute to GHG reductions and advancements of the City's broad sustainability goals.

The GHG Reduction Strategy identifies GHG emissions reduction measures to be implemented by development projects in three categories: built environment and energy, land use and transportation, and recycling and waste reduction. Some measures are mandatory for all proposed development projects and others are voluntary. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion.

Compliance with the mandatory measures and consistency with the reduction strategies called out in the GHGRS by the City would ensure an individual project's consistency with the 2030 GHGRS. Implementation of the proposed General Plan through 2030 would not constitute a cumulatively considerable contribution to global climate change.

City of San José Private Sector Green Building Policy (6-32)

In October 2008, the City adopted the Private Sector Green Building Policy (6-32) that establishes baseline green building standards for private sector new construction and provides framework for the implementation of these standards. This policy requires that applicable projects achieve minimum green building performance levels using the Council adopted standards. Future development under the proposed Downtown Strategy 2040 would be subject to this policy.

Climate Smart San José

Climate Smart San José was developed by the City to reduce air pollution, save water, and create a healthier community. The plan contains nine strategies to reduce carbon emissions consistent with the Paris Climate Agreement. These strategies include use of renewable energy, densification of neighborhoods, electrification and sharing of vehicle fleets, investments in public infrastructure, creating local jobs, and improving building energy-efficiency.

Reach Building Code

In 2019, the San José City Council approved Ordinance No. 30311 and adopted Reach Code Ordinance (Reach Code) to reduce energy-related GHG emissions consistent with the goals of Climate Smart San José. The Reach Code applies to new construction projects in San José. It requires new residential construction to be outfitted with entirely electric fixtures. Mixed-fuel buildings (i.e., use of natural gas) are required to demonstrate increased energy efficiency through a higher Energy Design Ratings and be electrification ready. In addition, the Reach Code requires EV charging infrastructure for all building types (above current CALGreen requirements), and solar readiness for non-residential buildings.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a greenhouse gas impact is considered significant if the Project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

GHG-1 ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***
Less Than Significant Impact

SHORT-TERM CONSTRUCTION GREENHOUSE GAS EMISSIONS

Project construction would result in minor increases in GHG emissions from on-site and construction equipment and emissions from construction workers' personal vehicle traveling to and from the Project construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of construction workers. Neither the City of San José nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions; however, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. The CalEEMod outputs prepared for the proposed Project (refer to Appendix F) calculated emissions with Project construction to be 990 MTCO₂e for the total construction period (18 months). Because Project construction will be a temporary condition (a total of 18 months) and would not result in a permanent increase in emissions that would interfere with the implementation of AB32, the temporary increase in emissions would be less than significant.

LONG-TERM OPERATIONAL GREENHOUSE GAS EMISSIONS

The proposed Project would include the demolition of three existing buildings on-site and construction of four new warehouse industrial buildings, totaling 714,491 sf. Operational, or long-term emissions, would occur over the Project's life. GHG emissions would result from direct emissions such as Project generated vehicular traffic and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power over the life of the Project, the energy required to convey water to, and wastewater from the Project site, the emissions associated with solid waste generated from the Project site, and any fugitive refrigerants from air conditioning or refrigerators. It should be noted that the Project would comply with the 2019 Title 24 Part 6 Building Energy Efficiency Standards. The standards require updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements that would cut residential energy use by more than 50 percent (with solar) and nonresidential energy use by 30 percent. The standards also encourage demand responsive technologies including battery storage and heat pump water heaters and improve the building's thermal envelope through high performance attics, walls and windows to improve comfort and energy savings (California Energy Commission, March 2018). The Project would also comply with the appliance energy efficiency standards in Title 20 of the California Code of Regulations. The Title 20 standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances. The Project would be constructed according to the standards for high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems

required in 2019 Title 24, Part 11 (CALGreen).

At the State and global level, improvements in technology, policy, and social behavior can also influence and reduce operational emissions generated by a project. The state is currently on a pathway to achieving the Renewable Portfolio Standards goal of 33 percent renewables by 2020 and 60 percent renewables by 2030 per SB 100. Further, the Project will not include natural gas appliances or natural gas plumbing.

The majority of warehouse emissions typically occur from mobile and energy sources. Energy and mobile sources are targeted by statewide measures such as low carbon fuels, cleaner vehicles, strategies to promote sustainable communities and improved transportation choices that result in reducing VMT, continued implementation of the Renewable Portfolio Standard (the target is now set at 60 percent renewables by 2030), and extension of the Cap-and-Trade program (requires reductions from industrial sources, energy generation, and fossil fuels). The Cap-and-Trade program covers approximately 85 percent of California's GHG emissions as of January 2015. The statewide cap for GHG emissions from the capped sectors (i.e., electricity generation, industrial sources, petroleum refining, and cement production) commenced in 2013 and will decline approximately three percent each year, achieving GHG emission reductions throughout the program's duration. The passage of AB 398 in July 2017 extended the duration of the Cap-and-Trade program from 2020 to 2030. With continued implementation of various statewide measures, the Project's operational energy and mobile source emissions would continue to decline in the future.

As discussed in Impact Statement GHG-2, below, the proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance which will ensure operational emissions reductions consistent with the 2030 GHGRS. As shown in Appendix F, the Project would include be consistent with Table A: General Plan policies and Table B: 2030 GHGRS Compliance. The proposed Project would include enrollment in SJCE TotalGreen, exceed construction and demolition waste diversion requirements to help the City achieve the Zero Waste Goal, and implement water conservation measures on-site. Therefore, the Project would be consistent with a qualified local GHG reduction plan under CEQA Guidelines section 15183.5. The Project does not include mixed-fuel buildings (does not include natural gas) and therefore is consistent with the City's Reach Building Code. The proposed Project, therefore, would be consistent with the City's GHGRS and General Plan and would have a less than significant GHG emissions impact.

GHG-2 ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Less Than Significant Impact

CITY OF SAN JOSÉ GREENHOUSE GAS REDUCTION STRATEGY COMPLIANCE CHECKLIST

The City of San José 2030 GHGRS is a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b) and therefore is the BAAQMD threshold for the City of San José (Option B in the Thresholds for Land Use Project discussed in the Regulatory section above). The GHGRS outlines the actions the City will undertake to achieve its proportional share of State GHG emission reductions for the interim target year 2030. Individual projects demonstrate their compliance with the GHGRS through the GHGRS Compliance Checklist. The GHGRS Compliance Checklist is included as

Appendix F of this Draft EIR. Compliance with the checklist is demonstrated by completing Table A (General Plan Policy Conformance) and Table B (Greenhouse Gas Reduction Strategies). Projects that propose alternative GHG mitigation measures must also complete Section C (Alternative Project Measures and Additional GHG Reductions). The proposed Project does not include any alternative measures.

As discussed above, the Project would be constructed in accordance with the latest California Building Code, green building regulations/CalGreen, the City's Council Policy 6-32 and the City's Green Building Ordinance. Additionally, Project construction and demolition waste would be diverted to exceed City requirements and least 75 percent of construction and demolition waste and 100 percent of metal would be recycled. The Project would also be enrolled in the San José Clean Energy (SJCE) TotalGreen program which includes 100 percent renewable energy and would meet U.S. Green Building Council LEED Silver requirements through various credits related to optimized energy performance and other sustainable features. Additionally, the Project would be solar-ready by including building roof space for a "Future PV Array" per California Code.

As detailed in Appendix F, the proposed Project would be consistent with the 2030 GHGRS Strategy. The Project would include Tier 2 multi-modal infrastructure (Mitigation Measure TRANS-1 in Section 3.7) including an internal bicycle/pedestrian pathway connecting the cul-de-sacs at McKay Drive/Automation Parkway and Commerce Drive/Qume Drive. The Project would also shift the existing curb lines along Commerce Drive and Qume Drive frontages 10-feet inwards to achieve a future 40-foot curb-to-curb width along both streets. The multimodal improvements would help reduce vehicle miles traveled (VMT) by providing enhanced pedestrian and bicycle mobility in the area and therefore would reduce mobile greenhouse gas emissions. The proposed Project would also be consistent with the 2030 GHG Reduction Strategy through compliance with the State's Model Water Efficient Landscape Ordinance and the City's Water-Efficient Landscape Ordinance (Chapter 15.11 of the San José Municipal Code). The proposed Project would include landscaped shading, including trees, in the parking areas and walkways. The Project landscaping would include 339 new 24-inch box trees which would cover approximately 21 percent of the site with landscaping. The trees would provide shading to help mitigate the urban heat island effect. Additionally, the Project would include low-flow fixtures and appliances and would utilize recycled water for the outdoor landscaping.

Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the Greenhouse Gas Reduction Strategy. As described above, the Project would not conflict with the 2030 GHGRS (refer to Appendix F for further detail). Therefore, the Project would be consistent with a qualified local GHG reduction plan under CEQA Guidelines section 15183.5. GHG emissions caused by long-term operation of the proposed would be less than significant.

CARB SCOPING PLAN

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance

mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program.

The latest CARB Climate Change Scoping Plan (2017) outlines the state's strategy to reduce state's GHG emissions to return to 40 percent below 1990 levels by 2030 pursuant to SB 32. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the First Update to the Climate Change Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions would be adopted as required to achieve statewide GHG emissions targets. As shown in **Table 3.4-1₂**, the Project is consistent with most of the strategies, while others are not applicable to the Project.

Table 3.4-1: Project Consistency with Applicable CARB Scoping Plan Measures

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and-Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA Projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
			covered at large sources in the Program's first compliance period.
	California Light-Duty Vehicle Greenhouse Gas Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	Consistent. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the Project would be required to comply with the Pavley emissions standards.
		2012 LEV III Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards	Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve Greenhouse Gas Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related Greenhouse Gas Targets	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	Consistent. The Project would provide development in the region that is consistent with the growth projections in the Regional Transportation Plan/Sustainable Communities Strategy (SCS) (Plan Bay Area 2050).
	Goods Movement	Goods Movement Action Plan January 2007	Not applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer Greenhouse Gas Regulation	Consistent. This measure applies to medium and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the Project would be required to comply with the requirements of this regulation.
	High Speed Rail	Funded under SB 862	Not applicable. This is a statewide measure that cannot be implemented by a Project Applicant or Lead Agency.
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	Consistent. The Project would not conflict with implementation of this measure. The Project would comply with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard.	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	Consistent. The Project would obtain electricity from the electric utility company, PG&E through SJCE. PG&E obtained 39 percent of its power supply from renewable sources in 2018. However, the Project would obtain electricity through SJCE TotalGreen program. Therefore, the utility would provide power when needed on-site that is composed of 100 percent renewable sources.
	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)		
Million Solar Roofs Program	Tax incentive program	Consistent. This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs.	

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
			Future tenants within the Project would be able to take advantage of incentives that are in place at the time of construction.
Water	Water	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would comply with the California Green Building Standards Code, which requires a 20 percent reduction in indoor water use. The Project would also comply with the City's Water-Efficient Landscape Ordinance (Chapter 15.11 of the San José Municipal Code).
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	Consistent. The State goal is to increase the use of green building practices. The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CalGreen requirements.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	Consistent. The Project includes light industrial uses such as a warehouse. However, the Project would comply with CARB Mandatory Reporting Regulation.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen code. The City has consistently achieved its state recycling mandates.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap and Trade Offset Projects	Not applicable. The Project site is an existing disturbed site located in an urban area. No forested lands exist on-site.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	Not applicable. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
			refrigerators and cold storage system. The Project is not expected to use large systems subject to the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset Projects for Livestock and Rice Cultivation	Not applicable. The Project site is an infill site. No grazing, feedlot or other agricultural activities that generate manure currently exist on-site or are proposed to be implemented by the Project.
Source: California Air Resources Board (CARB), <i>California's 2017 Climate Change Scoping Plan</i> , 2017b and CARB, <i>Climate Change Scoping Plan</i> , December 2008.			

As discussed above, the Scoping Plan reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. GHG emissions caused by long-term operation of the proposed would be less than significant.

Appendix B, Local Action, of the 2017 CARB Scoping Plan lists potential actions that support the State's climate goals. However, the Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The Project would implement Standard Permit Conditions outlined in Section 3.1 above during construction. For example, a few of the construction measures include enforcing idling time restrictions on construction vehicles, use of added exhaust muffling and filtering devices, replant vegetation in disturbed areas as quickly as possible, and posting a publicly visible sign with the telephone number and person at the lead agency to contact regarding dust complaints. As indicated above, GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new non-residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes is derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand. The Project would be subject to the 2022 standards by the time construction occurs, which is even more stringent than the current standards.

The Project would be required to comply with existing regulations, including applicable measures from the City's General Plan, or would be directly affected by the outcomes (vehicle trips and energy consumption would be less carbon intensive due to statewide compliance with future low carbon fuel standard amendments and increasingly stringent Renewable Portfolio Standards). As such, the Project would not conflict with any other state-level regulations pertaining to GHGs.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the

emissions savings from future regulatory measures, as they have not yet been developed. Nevertheless, it can be anticipated that operation of the Project would benefit from implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

PLAN BAY AREA

The Project would be consistent with the overall goals of Plan Bay Area 2050 to provide housing, healthy and safe communities, and climate protection with an overall goal to reduce VMT. While the Project would not provide housing, it is consistent with the goal of reducing VMT as the proposed Project has lower VMT than the existing uses on-site. As noted above, the Project would develop the Project site with industrial warehouse/distribution type uses consistent with the General Plan. The Project would create jobs in the community. Thus, implementation of the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and this impact would be less than significant.

3.5 HAZARDS AND HAZARDOUS MATERIALS

A Phase I Environmental Site Assessment (Phase I ESA), dated July 23, 2021, a Soil and Soil Vapor Investigation, dated July 27, 2021, and a Results of Agricultural Chemical Sampling Report, dated February 1, 2022 were prepared by Ardent Environmental Group, Inc. to address potential impacts concerning Hazards and Hazardous Materials associated with Project implementation. The following discussion is based on the Phase I ESA, Soil and Soil Vapor Investigation, and the Agricultural Chemical Sampling Report and the full reports are included as Appendices J1, J2, and J3 of this Draft EIR.

ENVIRONMENTAL SETTING

HISTORICAL USE OF PROJECT SITE AND ADJACENT PROPERTIES

Based on a review of historic aerial imagery, the Project site was primarily occupied by agricultural fields from 1939 to 1974. In 1979, the existing building at 2350 Qume Drive was developed, followed by the existing building at 2222 Qume Drive in 1982, and finally the building at 2150 Commerce Drive in 1984. Since it was developed in between the late 1970s to early 1980s, the Project site has been used for a range of office, research and development, manufacturing/assembling, and other commercial purposes.

Like the Project site, the area around the Project site was also used for agricultural purposes from at least 1939 to 1974. By 1979, portions of the Project area were redeveloped with commercial and industrial buildings. By 1982, the southern adjacent properties were developed with commercial and/or industrial buildings. By 2006, no more agricultural areas or vacant land was located in the Project area. The Project area has existed in its current layout since 2006.

CURRENT USE OF PROJECT SITE

The 32.80-acre Project site is comprised of three parcels and is developed with an industrial/business park complex containing three buildings totaling approximately 425,433 sf. **Figure 2-3: Existing Project Site** depicts the current development on the Project site. 2350 Qume Drive is developed with a two-story building and has been used as office, research and development, and manufacturing/assembling purposes. 2222 Qume Drive is developed with a single-story building and has been used as office, classroom, and for educational purpose and 2150 Commerce Drive is developed with a single-story building used as office and manufacturing/assembling purposes.

The Project site is currently occupied by BD, a medical device company, that assembles devices, manufactures biopharmaceutical products, and conducts research and development. Existing manufacturing and assembling and research and development activities use small quantities of chemicals.

CURRENT USE OF ADJACENT PROPERTIES

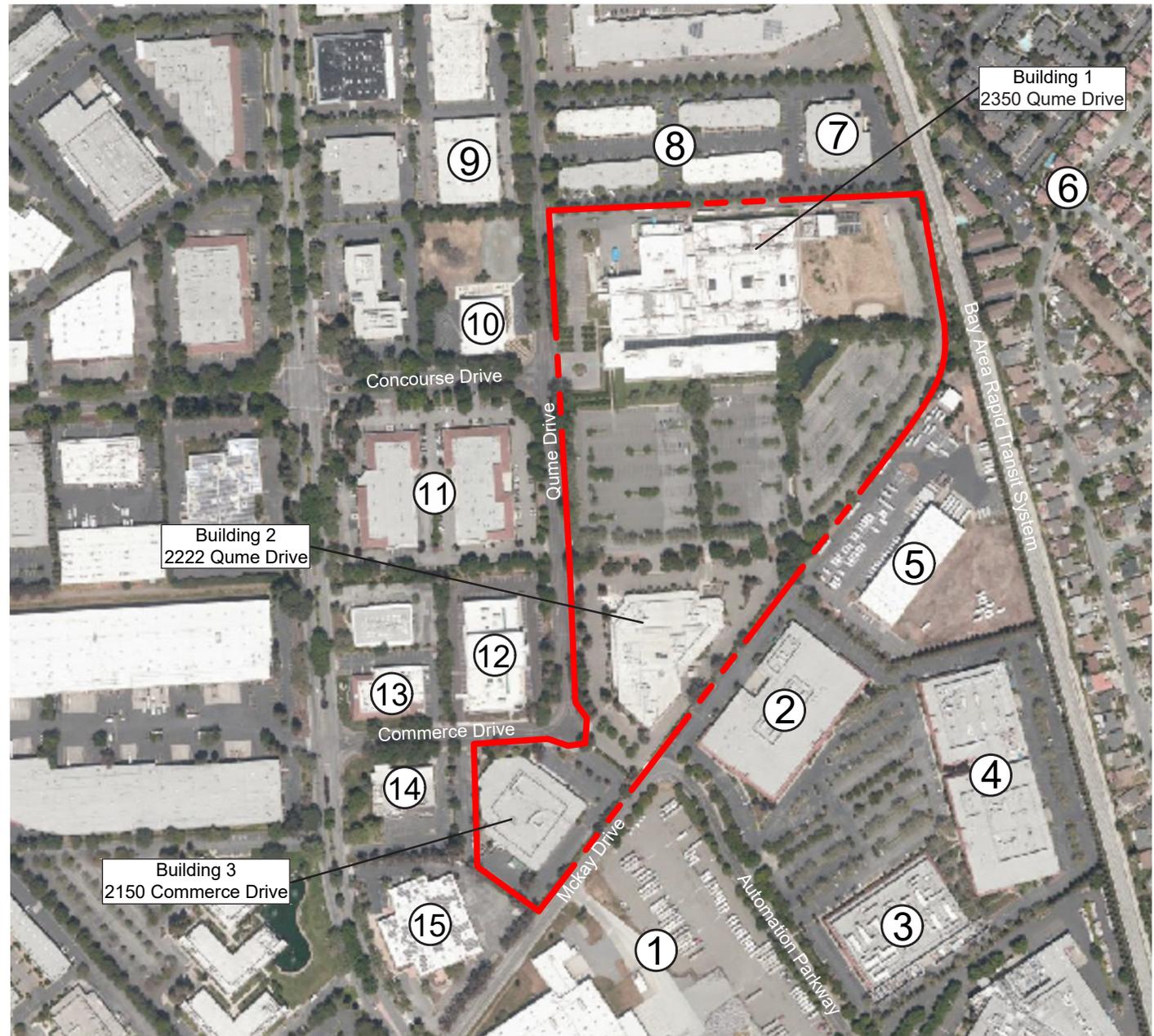
The Project area is generally comprised of commercial and industrial properties. A large residential area consisting of single and multi-family homes is located east of the site, beyond the BART corridor. Frito-Lay San José Distribution Center and an unnamed warehouse building are immediately east and adjacent to the site. Beyond these buildings is ASML HMI, a semiconductor manufacturer. A U.S. Postal Service Transportation Yard and Lumentum, an optical communications network and manufacturer, are located southeast of the site. Immediately north of the site are five multi-tenant commercial and retail buildings. L&T Precision Engineering, a machine manufacturing/assembling shop, is located immediately northwest

of the site. ACCO Engineered Systems, HVAC contractors, Lundy Plaza (multi-tenant commercial and fastfood buildings), and IPG Photonics Corporation a fiber laser manufacturer, are located west of the site. North East Medical Services and CeeNee Inc., an electrical supply store, are located immediately south-southwest and adjacent to 2150 Commerce Drive. **Figure 3.5-1: Surrounding Properties** depicts the Project area and identifies existing uses and tenants, as appropriate.

No above ground storage tanks (ASTs), evidence of underground storage tanks (USTs), or large quantities of possible hazardous materials or wastes were noted being stored by offsite facilities along the site property line.

LEGEND

- - - Approximate Site Boundary
- ① USPS Transportation Yard (1785 Automation Parkway)
- ② Unnamed Warehouse (1764 Automation Parkway)
- ③ Lumentum (1750 Automation Parkway)
- ④ ASML HMI (1762 Automation Pkwy)
- ⑤ Fito-Lay Distribution Center (1774 Automation Pkwy)
- ⑥ Single/Multi-Family Residential Area
- ⑦ Foreal Spectrum, Inc. (2370 Qume Drive)
- ⑧ Multi-Tenant Commercial Buildings (2360 to 2380 Qume Drive)
- ⑨ L&T Precision Engineering, Inc. (2395 Qume Drive)
- ⑩ ACCO Engineered Systems (2361 Qume Drive)
- ⑪ Lundy Plaza (2050 and 2092 Concourse Drive)
- ⑫ IPG Photonics Corporation (2201 Qume Drive)
- ⑬ ITW Labels (1980 Lundy Avenue)
- ⑭ CeeNee, Inc. (2102 Commerce Drive)
- ⑮ North East Medical Services (1870 Lundy Avenue)



Source: Ardent Environmental Group, Inc., 2021

Figure 3.5-1: Surrounding Properties

On-Site Sources of Contamination

A records search of the Santa Clara County Department of Environmental Health, Regional Water Quality Control Board's Geotracker database, and Department of Toxic Substances Control's (DTSC) Envirostor database found one record of the Project site pertaining to open cases of a leaking underground storage tanks (LUSTs), toxic releases, or site cleanup requirements (Becton Dickinson, Santa Clara Valley Water District Case #06S1E20F01f). This case is associated with the removal of a 12,000-gallon historical UST formerly located at 2350 Qume Drive. This has been listed as "Completed" or "Case Closed" status since 1992 and a closure letter is provided in Appendix J1.

Additionally, Envirostor includes records related to a "tiered permit" issued to a former occupant, Mage Power, of 2150 Commerce Drive (ID #71002693). According to DTSC, the permit was closed in 2001, however at the time the Phase I ESA was performed Envirostor listed the status of the permit as "inactive – needs evaluation". A 1997 site plan of this building showed an area referred to as "Waste Treatment", and this area was sampled as part of the Soil and Soil Vapor Investigation in May 2021. Subsequent to that, further investigation initiated by Ardent led to the discovery of the closure records, erroneously filed under an incorrect address, which the SCCDEH subsequently forwarded to the DTSC in an email dated June 29, 2021 and indicated that the SCCDEH considers the Mage Power case closed.

Based on the age of existing buildings at 2350 Qume Drive (1979) and 2150 Commerce Drive (1982), asbestos-containing materials (ACM) and lead based paint (LBP) are likely present. However, due to its date of development, the Phase I ESA concludes that LBP is not likely present in the existing building at 2222 Qume Drive. Further, based on the age of this building, friable ACMs are not likely present, although, non-friable ACMs such as roofing materials may still be present. As documented in the Phase 1 ESA, site reconnaissance was conducted and concluded that suspect ACMs appeared in good condition and no peeling paint was observed during site reconnaissance. Based on this information, no immediate asbestos or LBP abatement is needed.

Buildings at 2350 Qume Drive and 2150 Commerce Drive were reported on regulatory databases for the use, storage, and handling of chemicals and wastes, including halogenated hydrocarbons (i.e., chlorinated solvents). According to the regulatory files, chemical wastes generated at 2150 Commerce Drive were transported and stored at 2350 Qume Drive pending disposal. Although there was no indication in regulatory files suggesting the use of chlorinated solvents at 2222 Qume Drive, air quality permits indicated the use of degreasers, which commonly use chlorinated solvents. Based on the historical use of halogenated hydrocarbons and degreaser on the Project site, a subsurface screening investigation was prepared to assess whether elevated concentrations of volatile organic compounds (VOCs), namely halogenated hydrocarbons or chlorinated solvents, were present in the subsurface.

Soil and soil vapor investigations were completed in May 2021. Soil samples were analyzed for VOCs, Title 22 metals, hexavalent chromium, and pH by a state-certified environmental laboratory. In accordance with the City's General Plan Goal EC-7 – Environmental Contamination, Policy EC-7.11, based on the historic agriculture uses on the Project site, 42 shallow soil samples (0.5 feet bgs) were collected in January 2022 and tested for the presence of organochlorine pesticides and pesticide-based metals (arsenic and lead), in accordance with DTSC guidelines. The 42 samples were composited into eleven samples and tested in accordance with EPA Method No 8081A. Eleven discrete samples collected throughout the site were analyzed for arsenic and lead in general accordance with EPA Method No. 6010B.

Soil Vapor Investigation

To assess whether vapor intrusion may be a concern, detectable concentrations of VOCs were compared to the California Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Levels for industrial commercial land use (SFRWQCB-ESLi), the DTSC Screening Levels for industrial/commercial land use (DTSC-SLi), and the EPA Regional Screening Levels for industrial/commercial land use (EPA-RSLi). SFRWQCB-ESLi screening values are based on a conservative EPA attenuation factor of 0.03 and 1 in 1,000,000 cancer risk. However, DTSC uses a less stringent attenuation factor of 0.001, along with cancer risk factors from 1 in 1,000,000 to 1 in 10,000. Based on the modified soil vapor screening values, concentrations of benzene, PCE, chloroform, and ethylbenzene were noted to exceed the most stringent SFRWQCB-ESLi in three of ten onsite samples. However, none of the samples exceeded the DTSC-SLi or EPA-RSLi, even when calculated using a conservative cancer risk factor. Screening levels for chemicals in soil, groundwater, and soil vapor are not intended to establish regulations or restrictions on land use nor to establish any mitigation or remediation requirements, and the presence of a chemical at concentrations in excess of a screening level does not directly indicate adverse effects on human health or the environment, rather that additional evaluation is warranted. Further analysis of this potential issue is addressed below.

Soil Investigations

Soil samples from the “Waste Treatment” area, collected in May 2021, were analyzed for VOCs, Title 22 metals, hexavalent chromium, and pH in general accordance with EPA Method Nos. 8260B, 6010B/7470/7471, 7196A, and 9045B, respectively. Laboratory results were compared to regulatory guidelines for the protection of human health through dermal contact, inhalation, and ingestion (i.e., VOCs, Title 22 metals, and hexavalent chromium), and for the protection of drinking water (i.e., VOCs). With the exception of arsenic which was compared to California Code of Regulations Title 22 hazardous waste criteria, concentrations were compared to the human health risk criteria established by SFRWQCB-ESLi, EPA-RSLi, and DTSC-SLi values.

Laboratory results indicated no detectable concentrations of VOCs or hexavalent chromium, with detection limits set well below SFRWQCB-ESLi, EPA-RSLi, and DTSC-SLi regulatory screening values in the soil samples. No detectable to low concentrations of metals were reported, and pH was reported at slightly alkaline values (i.e., basic) in native soils, versus more neutral readings in the fill materials. Based on these results, no elevated concentrations of chemicals tested were noted in the designated “Waste Treatment” area.

The eleven composited shallow samples were compared to the DTSC Screening Levels for industrial/commercial land use (DTSC-SLi), the EPA Regional Levels (EPA-RSLi), and the SFRWQCB-ESLi, which represent suggested cleanup goals for the protection of occupants based on human health risk criteria for dermal, ingestion, and inhalation exposure. The eleven discrete samples were compared to the human health risk criteria set forth in DTSC-SLi, EPA-RSLi, and SFRWQCB-ESLi values for metals, excluding arsenic. For arsenic, which is prevalent naturally throughout California, sample results are compared to the DTSC-established level of 12 mg/kg. The laboratory results of the discrete and composite shallow soil samples indicated pesticides were below applicable detection limits, lead at non detectable to low levels (well below applicable screening levels for the protection of human health), and arsenic below DTSC screening levels. Therefore, all results were below applicable human health risk screening

levels.

Off-Site Sources of Contamination

The nearest off-site LUST cleanup site located at 2036 Concourse Drive, approximately 0.30-mile west of the Project site (SFRWQCB Case #43S0312).¹¹ The former operator was Dielectric Semiconductor and the potential contaminant of concern on this site was gasoline. Site investigation and remedial activities were taken following accidental release in 1988, and the case has been closed since 2017.

REGULATORY FRAMEWORK

FEDERAL AND STATE

Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.)

The Resource Conservation and Recovery Act (RCRA) grants authority to the U.S. Environmental Protection Agency (USEPA) to control hazardous waste from start to finish. This covers the production, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of non-hazardous solid waste. RCRA allows individual states to develop their own programs for the regulation of hazardous waste as long as they are at least as stringent as the RCRA. The State has developed the California Hazardous Waste Control Law (Health and Safety Code [HSC] sec. 25100 et. Seq. And 22 California Code of Regulations [CCR] sec. 66260.1 et seq.) and the USEPA has delegated authority for RCRA enforcement to the State. Primary authority for the Statewide administration and enforcement of HWCL rests with California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC).

RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The 1986 amendments to the RCRA enabled the USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act of 1970, which is implemented by the federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. OSHA requirements, as set forth in 29 Code of Federal Regulations (CFR) Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right-to-know. The U.S. Department of Labor has delegated the authority to administer OSHA regulations to the State of California. The California OSHA program (Cal/OSHA) (codified in the CCR, Title 8, or 8 CCR generally and in the Labor Code secs. 6300-6719) is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP) for potential workplace hazards, including those associated with hazardous materials.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly

¹¹ State Water Resources Control Board, 2022. Geotracker. Available at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000008024. Accessed March 8, 2022.

known as Superfund, was enacted by Congress on December 11, 1980. This law (U.S. Code Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables the revision of the National Contingency Plan (NCP). The NCP (Title 40, CFR, Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and the National Priorities List

The USEPA also maintains the Comprehensive Environmental Response Compensation (CERCLIS) and Liability Information System list. This list contains sites that are either proposed to be or on the National Priorities List (NPL), as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The NPL is a list of the worst hazardous waste sites that have been identified by Superfund. There are no NPL sites on the Project site.

Emergency Planning and Community Right-to-Know Act

The federal Emergency Planning and Community Right-To-Know Act (EPCRA) was enacted to inform communities and residents of chemical hazards in their area. Businesses are required to report the locations and quantities of chemicals stored on-site to both State and local agencies. EPCRA requires the USEPA to maintain and publish a digital database list of toxic chemical releases and other waste management activities reported by certain industry groups and federal facilities. This database, known as the Toxic Release Inventory, gives the community more power to hold companies accountable for their chemical management.

Hazardous Materials Transportation Act

The U.S. Department of Transportation (DOT) receives authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act, as amended and codified (49 USC 5101 et seq.). The DOT is the primary regulatory authority for the interstate transport of hazardous materials and establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing).

In California, Section 31303 of the California Vehicle Code states that any hazardous material being moved from one location to another must use the route with the least travel time. This, in practice, means major roads and highways, although secondary roads are permitted to be used for local delivery. These policies are enforced by both the California Highway Patrol and the California Department of Transportation (Caltrans).

Clean Water Act/Spill Prevention, Control and Countermeasure (SPCC) Rule

The Clean Water Act (CWA) (33 USC Section 1251 et seq.) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA

requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine Regional Water Quality Control Boards (RWQCBs). The Project is within the jurisdiction of the San Francisco Bay RWQCB (SFRWQCB).

Section 402 of the CWA authorizes the California State Water Resources Control Board (SWRCB) to issue NPDES General Construction Storm Water Permit (Water Quality Order 99-08-DWQ), referred to as the "General Construction Permit."

Construction activities can comply with and be covered under the General Construction Permit provided that they:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and
- Perform inspections of all BMPs.

NPDES regulations are administered by the SFRWQCB. Projects that disturb one or more acres are required to obtain NPDES coverage under the Construction General Permits.

National Fire Protection Association

The National Fire Protection Association (NFPA) provides codes and standards, research, trainings, and education for fire protection. The NFPA publishes more than 300 codes and standards intended to minimize the possibility and effects of fire and other risks. The NFPA standards are recommended guidelines and nationally accepted good practices in fire protection. Specific codes of the NFPA are typically implemented through the California Fire Code (CFC) or at the local level through the respective county or city.

Federal Aviation Regulations, Part 77

Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (referred to as FAR Part 77), requires that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways or which would otherwise stand at least 200 feet in height above ground. For the Project site, the maximum allowable height is 50 feet in height above ground per the City of San José Municipal Code. The proposed building would be within the allowable height of 50 feet and FAA notification would not be required.

California Environmental Protection Agency

CalEPA has jurisdiction over hazardous materials and wastes at the State level. CalEPA and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. DTSC

is the department of CalEPA responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. DTSC regulates hazardous waste in California primarily under the authority of the federal and the California HSC (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals. Hazardous wastes regulated by California but not by the USEPA are called "non-RCRA hazardous wastes." Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Government Code Section 65962.5 (Cortese List)

Government Code Section 65962.5, amended in 1992, requires the CalEPA to develop and update annually the Hazardous Waste and Substances Sites (Cortese) List, which is a list of DTSC-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks and have had a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites that have had a known migration of hazardous waste/material. The Cortese List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release site. Enforcement of directives from DTSC is handled at the local level, in this case the Santa Clara County Department of Environmental Health (DEH). The SFRWQCB also has the authority to implement regulations regarding the management of soil and groundwater investigation.

CalFire Strategic Fire Plan 2019

CalFire uses this plan to direct and guide its fire management activities for the State Responsibility Area (SRA) throughout California. CalFire's mission is to serve and safeguard the people and protect the property and resources of California. CalFire responds to emergencies such as fires of all types, vehicle accidents, floods, earthquakes, hazardous material spills, and others within the SRA. CalFire provides direction for fire prevention using fire resource assessments, a variety of available data, mapping and other tools. The plan emphasizes "pre-fire" management, which is a process to assess alternatives to protect assets from unacceptable risk of wildland fire damage and focus on those actions that can be taken in advance of a wildland fire to potentially reduce the severity of the fire and ensure safety. Pre-fire management activities include prescribed burning, fuel breaks, forest health treatments and removal of hazardous vegetation.

CalFire has mapped fire threat potential throughout California. It ranks fire threats based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threat.

California Fire Code

Title 24 of the CCR, also known as the California Building Standards Code, contains the CFC, included as Title 24, Part 9. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The California HSC, Division 20, Chapter 6.95, known as the Hazardous Materials Release Response Plans and Inventory Act or the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Businesses must submit this information to the County DEH. The DEH verifies the information and provides it to agencies responsible for protection of public health and safety and the environment. Business Plans are required to include emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material, including, but not limited to, all of the following:

- Immediate notification to the administering agency and to the appropriate local emergency rescue personnel.
- Procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment.
- Evacuation plans and procedures, including immediate notice, for the business site.

Business Plans are also required to include training for all new employees, and annual training, including refresher courses, for all employees in safety procedures in the event of a release or threatened release of a hazardous material.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste:

- identification and classification;
- generation and transportation;
- design and permitting of recycling, treatment, storage, and disposal facilities;
- treatment standards;
- operation of facilities and staff training; and
- closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency (CUPA). The Program

Elements consolidated under the Unified Program are Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (“Tiered Permitting”); Aboveground Petroleum Storage Tank SPCC; Hazardous Materials Release Response Plans and Inventory Program (a.k.a. Hazardous Materials Disclosure or “Community-Right-To-Know”); California Accidental Release Prevention Program (Cal ARP); Underground Storage Tank (UST) Program; and Uniform Fire Code Plans and Inventory Requirements.

The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA. The Project Site is in San Bernardino County. The CUPA designated for San Bernardino County is the Hazardous Materials Division of the San Bernardino County Fire Department.

Department of Toxic Substance Control

DTSC is a department of CalEPA and is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California HSC (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. Government Code Section 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites; Department of Health Services lists of contaminated drinking water wells; sites listed by the SWRCB as having UST leaks and have had a discharge of hazardous wastes or materials into the water or groundwater; and lists from local regulatory agencies of sites that have had a known migration of hazardous wastes and/or materials.

California Office of Emergency Services

To protect the public health and safety and the environment, the California Office of Emergency Services is responsible for establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) needs to be available to firefighters, public safety officers, and regulatory agencies. The information must be included in these institutions’ business plans to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment.

These regulations are covered under Chapter 6.95 of the California HSC Article 1 – Hazardous Materials Release Response and Inventory Program (§§25500 to 25520) and Article 2 – Hazardous Materials Management (§§25531 to 25543.3). CCR Title 19, Public Safety, Division 2, Office of Emergency Services, Chapter 4 – Hazardous Material Release Reporting, Inventory, and Response Plans, Article 4 (Minimum Standards for Business Plans) establishes minimum statewide standards for Hazardous Materials Business Plans (HMBP). These plans shall include the following: (1) a hazardous material inventory in accordance with Sections 2729.2 to 2729.7; (2) emergency response plans and procedures in accordance with Section 2731; and (3) training program information in accordance with Section 2732.

Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the State. Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following: 500 pounds of a solid substance, 55 gallons of a liquid, 200 cubic feet of compressed gas, a hazardous compressed gas in any amount, or hazardous waste in any quantity.

California Emergency Services Act. Government Code 8550–8692

Government Code Section 8550–8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, man-made, or war-caused emergencies which result in conditions of disaster or extreme peril to life, property, and the resources of the State, and generally, to protect the health and safety and preserve the lives and property of the people of the State.

California Occupational Safety and Health Administration

Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Asbestos-Containing Materials (ACM).

Asbestos, a natural fiber used in the manufacturing of different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) asbestos-containing materials (ACM) were banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials were not banned completely. In California, any facility known to contain ACMs is required to have a written Asbestos Operations and Maintenance (O&M) Program. Removal of ACMs must be conducted in accordance with the requirements of the Mohave Desert Air Quality Management District (MDAQMD), which enforces the Asbestos National Emission Standard for Hazardous Air Pollutants, as it applies to asbestos removal and demolitions.

Lead-Based Paint

Lead-based paint has been identified by OSHA, the USEPA, and the Department of Housing and Urban Development as a potential health risk to humans, particularly children, based on its effects to the central nervous system, kidneys, and bloodstream. The Department of Housing and Urban Development classifies the risk of lead-based paint based upon the painted surface's age and condition. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, 8 CCR Section 1532.1 establishes the rules and procedures for conducting demolition and construction activities and establishes exposure limits, exposure monitoring, and respiratory protection for workers exposed to lead.

Division of Oil, Gas and Geothermal Resources Map

To evaluate the presence of oil or gas wells on-site and in the immediate site vicinity, maps available online

at the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (<https://maps.conservation.ca.gov/doggr/wellfinder/#/>) were reviewed. No oil, gas or geothermal wells were identified on or on properties adjoining the Project site.

Title 8, California Code of Regulations, Section 2700 et seq., “High Voltage Safety Orders”

Title 8 of the CCR specifies requirements and minimum standards for safety when installing, operating, working around, and maintaining electrical installations and equipment.

Title 14, California Code of Regulations, Sections 1250-1258, “Fire Prevention Standards for Electric Utilities”

Title 14 of the CCR provides specific exemptions from electric pole and tower firebreak. Title 14 also provides conductor clearance standards and specifies when and where standards apply. These standards address hazards that could be caused by sparks from conductors of overhead lines, or that could result from direct contact between the line and combustible objects.

LOCAL

City of San José General Plan

The General Plan includes the following hazardous material policies applicable to the Project:

- Policy EC-6.6: Address through environmental review for all proposals for new residential, park and recreation, school, day care, hospital, church or other uses that would place a sensitive population in close proximity to sites on which hazardous materials are or are likely to be located, the likelihood of an accidental release, the risks posed to human health and for sensitive populations, and mitigation measures, if needed, to protect human health.
- Action EC-6.8: The City will use information on file with the County of Santa Clara Department of Environmental Health under the California Accidental Release Prevention (CalARP) Program as part of accepted Risk Management Plans to determine whether new residential, recreational, school, day care, church, hospital, seniors or medical facility developments could be exposed to substantial hazards from accidental release of airborne toxic materials from CalARP facilities.
- Action EC-6.9: Adopt City guidelines for assessing possible land use compatibility and safety impacts associated with the location of sensitive uses near businesses or institutional facilities that use or store substantial quantities of hazardous materials by September 2011. The City will only approve new development with sensitive populations near sites containing hazardous materials such as toxic gases when feasible mitigation is included in the projects.
- Policy EC-7.1: For development and redevelopment projects, require evaluation of the proposed site’s historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.
- Policy EC-7.2: Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and

provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, State and federal laws, regulations, guidelines and standards.

- Policy EC-7.4: On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to project approval. Mitigation and remediation of hazardous building materials, such as lead-based paint and asbestos containing materials, shall be implemented in accordance with State and federal laws and regulations.
- Policy EC-7.5: In development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and State requirements.
- Action EC-7.8: When an environmental review process identifies the presence of hazardous materials on a proposed development site, the City will ensure that feasible mitigation measures that will satisfactorily reduce impacts to human health and safety and to the environment are required of or incorporated into the projects. This applies to hazard materials found in the soil, groundwater, soil vapor, or in existing structures.
- Action EC-7.9: Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with contaminated soil and/or groundwater or where historical or active regulatory oversight exists.
- Action EC-7.10: Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.
- Action EC-7.11: Require sampling for residual agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety during construction. Mitigation to meet appropriate end use such as residential or commercial/industrial shall be provided.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a hazards and hazardous materials impact is considered significant if the Project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

HAZ-1

Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact

The proposed Project would develop four new industrial warehouse distribution buildings that would include limited use and storage of hazardous materials and substances such as cleaners, paints, solvents, and fertilizers and pesticides for site landscaping. Operation of the Project would include the use and storage of cleaning supplies and maintenance chemicals in small quantities, similar to other businesses nearby and would not generate substantial hazardous emissions or chemical releases that would affect surrounding uses. All materials and substances would be subject to applicable health and safety requirements.

Additionally, compliance with applicable federal, local, and State requirements would ensure no significant hazard to the public or the environment are created through the routine transport, use, or disposal of hazardous materials. Thus, impacts would be less than significant.

HAZ-2

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact with Mitigation Incorporated

The Project is not anticipated to result in a release of hazardous materials into the environment. The proposed warehouse uses would be expected to use limited hazardous materials and substances such as

cleaners, paints, solvents, and fertilizers and pesticides for site landscaping. All materials and substances would be subject to applicable health and safety requirements.

Due to the age of the existing buildings, there could be asbestos containing materials (ACM) and/or lead based paint (LBP), which were common in buildings of this era. Implementation of the following Standard Permit Conditions during demolition and removal of building materials would ensure that impacts from removal of ACMs or LBP would be less than significant.

Standard Permit Condition

Asbestos and Lead-Based Paint

- i. In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site building(s) to determine the presence of asbestos-containing materials (ACMs) and/or lead-based paint (LBP).
- ii. During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Title 8, California Code of Regulations (CCR), Section 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the type of lead being disposed.
- iii. All potentially friable asbestos containing materials (ACMs) shall be removed in accordance with National Emission Standards for Air Pollution (NESHAP) guidelines prior to demolition or renovation activities that may disturb ACMs. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8, CCR, Section 1529, to protect workers from asbestos exposure.
- iv. A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- v. Materials containing more than one-percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one-percent asbestos shall be completed in accordance with BAAQMD requirements and notifications.

As discussed above, investigations into historical releases of hazardous materials, the LUST formerly located on 2350 Qume Drive and the Tiered Permit at 2150 Commerce Drive, have been properly closed by the applicable agencies. Recent soil investigations of the "Waste Treatment" area found no detectable to low concentrations of VOCs, hexavalent chromium, and metals. Shallow soil samples were analyzed for the presence of organochlorine pesticides and pesticide-based metals (arsenic and lead), and concentrations were found to be below applicable human health risk screening levels. Thus, these historic uses result in no human health risk to construction workers or future occupants of the Project.

Based on results of the soil vapor investigation, concentrations of VOCs are considered low and do not pose a human health risk to occupants of the site through possible vapor intrusion. However, due to the presence of the building slabs, the soil vapor testing was limited to easily accessible building perimeters and not performed under the slabs. Based upon a few detections of soil gas above commercial/industrial

environmental screening levels within proposed APNs 244-15-026 and 244-15-003, the Project would implement Mitigation Measure HAZ-1 which requires preparation and approval of a Soil Management Plan (SMP). As such, disturbance of onsite soils would not result in the release of hazardous materials that could cause a significant hazard to the public or the environment.

Impact HAZ-1: Project construction activities would disturb potentially volatile organic compound (VOC)-contaminated soils beneath building slabs within proposed APNs 244-15-026 and 244-15-003, which could result in impacts to construction workers and future site occupants from exposure to soil and/or soil vapor that is in exceedance of the Commercial/Industrial Environmental Screening Levels for VOCs.

Mitigation Measure

HAZ-1 Soil Vapor Considerations

Prior to the issuance of grading permits, a site-specific Construction Health and Safety Plan shall be prepared by a qualified environmental professional and submitted to the City of San José Environmental Services Department. The Construction Health and Safety Plan shall include the following elements, as applicable:

- Provisions for personal protection and monitoring exposure to construction workers,
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered,
- Procedures for the safe storage, stockpiling, and disposal of any contaminated soils,
- Emergency procedures and responsible personnel.

Prior to issuance of a building permit, the applicant shall conduct additional soil gas testing in the areas where VOC exceedances were detected to determine soil gas concentrations and shall submit this data to the City of San José Environmental Services Department for review. If the results of the soil gas testing reveal concentrations of VOCs above applicable regulatory environmental screening levels for an industrial use, applicant shall obtain regulatory oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, or the Santa Clara County Department of Environmental Health under their Site Cleanup Program.

Implementation of the mitigations described above will reduce contaminant exposure impacts to construction workers and future site occupants from exposure to soil and/or soil vapor to a less than significant level through compliance with existing regulations.

HAZ-3

Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact

The only school within 0.25-mile of the Project site is Brooktree Elementary School, located at 1781 Olivetree Drive, approximately 900-feet southeast of the Project site, separated by the BART corridor. The

proposed Project is an industrial warehouse distribution use and could include routine transport of limited hazardous materials and substances such as cleaners, paints, solvents, and fertilizers and pesticides for site landscaping. The Project would not include manufacturing or other industrial land uses that would generate hazardous emissions. Transport of hazardous materials within the Project area would be regulated by RCRA. Further, the General Plan identifies Lundy Avenue and Berryessa Road as primary truck routes.¹² The I-680 and I-880 can each be accessed from the Project site via Lundy Avenue and Berryessa Road. It is anticipated that Project trucks would generally utilize these routes. These roadways do not pass by Brooktree Elementary School, which is part of a different community than the Project site and does not share an immediate roadway network.

Therefore, although the proposed Project is within a quarter mile of a school, the nature of the Project activities and operations would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in a manner that could impact schools in the Project area. Thus, impacts would be less than significant.

HAZ-4

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact

As discussed above, the Project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There are two historical cases of hazardous release on the Project site, described as follows. One record of the Project site was found pertaining to a closed case regarding a LUST. This case is classified as “Completed or Case Closed” since 1992, meaning a closure letter or other formal closure decision document has been issued for the site. Further, there is one case listed as “Inactive – Needs Evaluation” on the Project site. Based on the results of the Soil and Soil Vapor investigation (Appendix J2), no detectable concentrations of VOCs and hexavalent chromium, with detection limits set well below the regulatory screening values and no detectable to low concentrations of metals were reported.

The nearest offsite LUST cleanup site is located at 2036 Concourse Drive, approximately 0.30-mile west of the Project site. Based on the results of the Phase I ESA and subsequent Soil and Soil Vapor Investigation, the Project did not identify recognized environmental conditions (RECs) within the Project site. Therefore, the proposed Project would not create a significant hazard to the public or the environment with implementation Mitigation Measures HAZ-1.

¹² City of San José, 2011. Envision San José 2040 General Plan Primary Truck Routes Diagram. Available at <https://www.sanjoseca.gov/home/showpublisheddocument/22563/636688980484100000>. Accessed on March 9, 2022.

HAZ-5

Would the project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact

The Project site is not located within two miles of a public airport or private airstrip. The Project site is located approximately 2.70 miles northeast of Mineta San José International Airport, the closest major airport. The Project site is located approximately 5.60 miles northwest of the Reid Hillview Airport, the closest minor airport. The Project site is not located within the “Airport Influence Area” defined by the Santa Clara County Airport Land Use Commission’s Comprehensive Land Use Plan (CLUP). According to Figures 3.8-1 and 3.8-2 in the General Plan EIR, the proposed Project is not located within the San José International or Reid-Hill Airport Safety Zones. In addition, as the proposed structure’s maximum height is below the FAR Part 77 notification surface elevation over the site (e.g., approximately 75 feet above ground), the Project does not require FAA airspace safety review. The Project site would not be located within an airport land use plan or within two miles of a public airport. Thus, no impacts would occur.

HAZ-6

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

Less Than Significant Impact

Implementation of the Project would not impair or physically interfere with an adopted emergency response or evacuation plan. The City of San José Emergency Operations Plan (EOP) was prepared by the City describing the City’s response to emergency situations associated with natural disasters, technological incidents and nuclear defense operations. The EOP outlines the overall organizational and operational concepts in relation to response and recovery and includes the roles and responsibilities of the various committees and agencies during an emergency, and the activation and execution procedures of the emergency response system.

No revisions to the EOP would be required as a result of the proposed Project. Primary access to all major roads would be maintained during construction of the proposed Project. Additionally, prior to issuance of any building permits, the Project would be reviewed for conformance with all applicable Fire Code and Building Code requirements.

HAZ-7

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

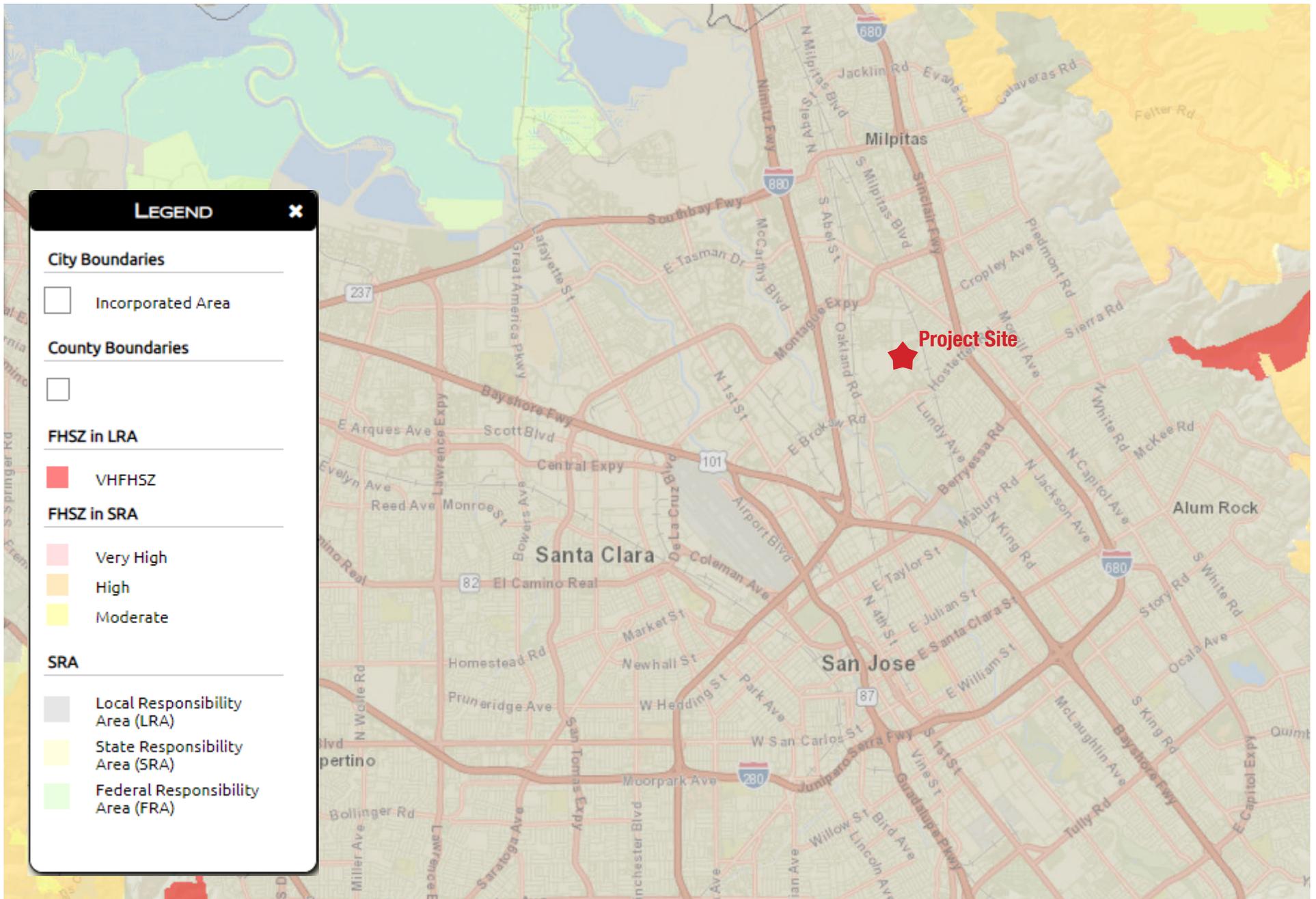
No Impact

CAL FIRE identifies Fire Hazard Severity Zones (FHSZ) and designates State of Local Responsibility Areas within the State of California. New developments located in ‘Very High’ Fire Hazard Severity Zones are required to comply with exterior wildfire design and construction codes as well as vegetation clearance

and other wildland fire safety practices for structures. The proposed Project is not located within a Very High Fire Hazard Severity Zone (VHFHSZ) within a State Responsibility Area (SRA) or a Local Responsibility Area (LRA).¹³ The proposed Project is also outside of the Santa Clara County Wildland Urban Interface Fire Area.¹⁴ The nearest VHFHSZ is approximately four miles southeast of the Project site. See **Figure 3.5-2: Fire Hazard Severity Zones** and **Figure 3.5-3: Santa Clara County Wildland Urban Interface Area**. The Project site is in a developed urban area, is not within a VHFHSZ, and is not within or directly adjacent to a wildland interface area. Therefore, there would be no impact.

¹³ California Department of Forestry and Fire Protection, 2022. FHSZ View. Available at: <https://egis.fire.ca.gov/FHSZ/>. Accessed March 7, 2022.

¹⁴ County of Santa Clara. Santa Clara County Wildland Urban Interface Fire Area. Available at: https://plandev.sccgov.org/sites/g/files/exjcpb941/files/WUIFA_Adopted_Map.pdf. Accessed on February 4, 2022.



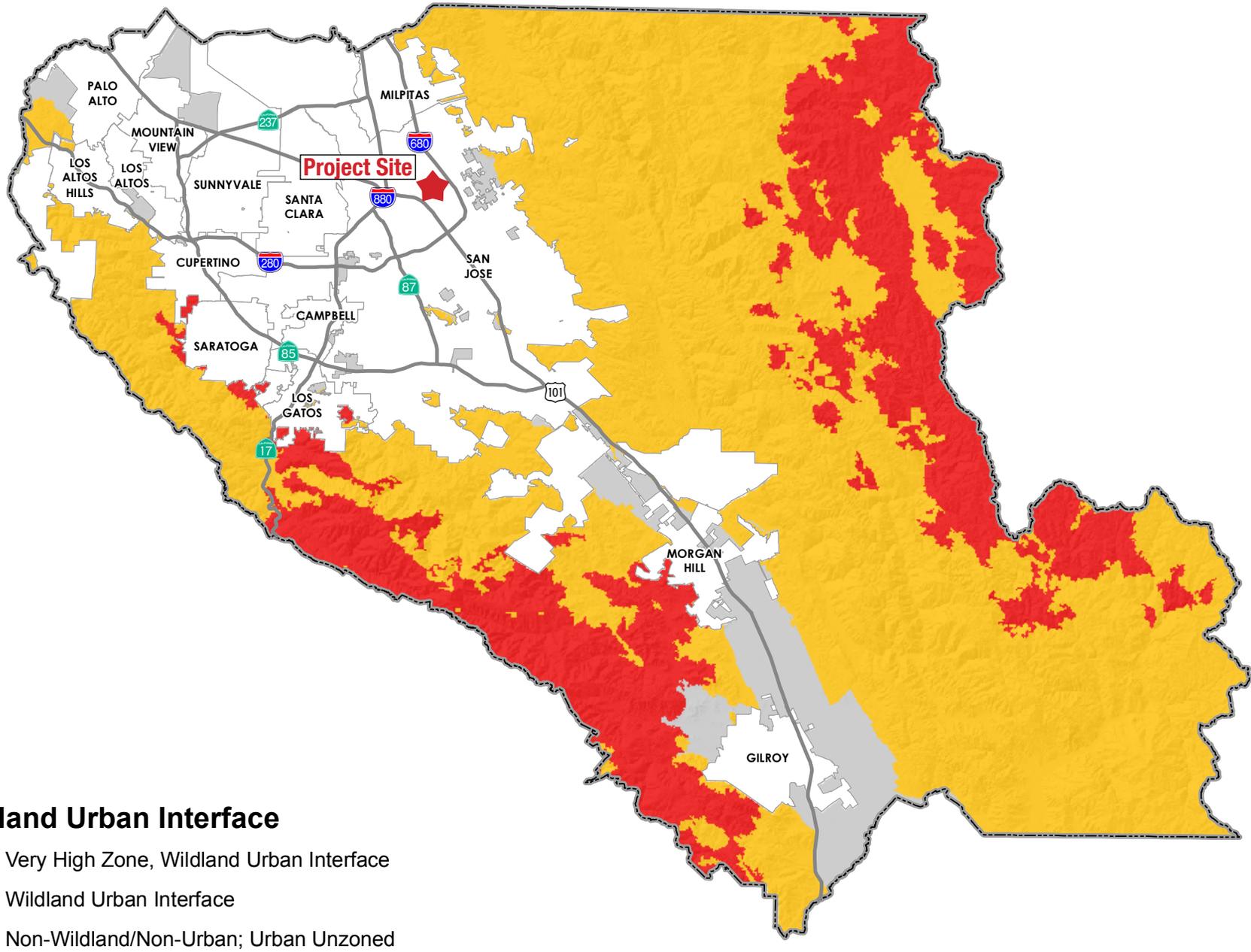
Source: CALFIRE, 2022

Figure 3.5-2: Fire Hazard Severity Zone

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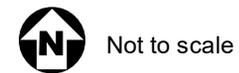


Not to scale



Source: County of Santa Clara, 2009

Figure 3.5-3: Santa Clara County Wildland Urban Interface Fire Area
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3.6 NOISE AND VIBRATION

The noise and vibration evaluation is based upon an Acoustical Assessment prepared by Kimley-Horn in June 2022. A copy of this report is attached in Appendix K of this Draft EIR.

ACOUSTIC FUNDAMENTALS

SOUND AND ENVIRONMENTAL NOISE

Acoustics is the science of sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. The fundamental acoustics model consists of a noise source, receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this ambient noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals (μPa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness. **Table 3.6-1: Typical Noise Levels** provides typical noise levels.

Table 3.6-1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	– 110 –	Rock Band
Jet fly-over at 1,000 feet		
	– 100 –	
Gas lawnmower at 3 feet		
	– 90 –	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	– 80 –	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	– 70 –	Vacuum cleaner at 10 feet
Commercial area		Normal Speech at 3 feet
Heavy traffic at 300 feet	– 60 –	
		Large business office
Quiet urban daytime	– 50 –	Dishwasher in next room

Quiet urban nighttime	– 40 –	Theater, large conference room (background)
Quiet suburban nighttime		
Quiet rural nighttime	– 30 –	Library
		Bedroom at night, concert hall (background)
	– 20 –	
		Broadcast/recording studio
	– 10 –	
Lowest threshold of human hearing	– 0 –	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level (L_{eq}) is the average noise level averaged over the measurement period, while the day-night noise level (DNL) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 PM to 7:00 AM. Most commonly, environmental sounds are described in terms of L_{eq} that has the same acoustical energy as the summation of all the time-varying events. Each is applicable to this analysis and defined in **Table 3.6-2: Definitions of Acoustical Terms**.

Definitions of Acoustical Terms.

Table 3.6-2: Definitions of Acoustical Terms

Term	Definitions
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in μPa (or 20 micronewtons per square meter), where 1 pascals is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in dB as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 μPa). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.

Term	Definitions
A-Weighted Sound Level (dBA)	The sound pressure level in dB as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L_{eq})	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
Maximum Noise Level (L_{max}) Minimum Noise Level (L_{min})	The maximum and minimum dBA during the measurement period.
Exceeded Noise Levels (L_{01} , L_{10} , L_{50} , L_{90})	The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day-Night Noise Level (DNL)	A 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity at nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA DNL.
Community Noise Equivalent Level (CNEL)	A 24-hour average L_{eq} with a 5 dBA weighting during the hours of 7:00 AM to 10:00 AM and a 10 dBA weighting added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be used. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

A-Weighted Decibels

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions. Under the dB scale, three sources of equal loudness together would produce an increase of 5 dBA.

Sound Propagation and Attenuation

Sound spreads (propagates uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70

dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted:

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss. While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance. Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The DNL as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA DNL is the threshold at which a substantial percentage of people begin to report annoyance¹⁵.

GROUNDBORNE VIBRATION

Sources of groundborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g. factory machinery) or transient (e.g. explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum

¹⁵ Federal Interagency Committee on Noise, *Federal Agency Review of Selected Airport Noise Analysis Issues*, August 1992.

instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 3.6-3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

Table 3.6-3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.008	-	Extremely fragile historic buildings, ruins, ancient monuments	-
0.01	Barely Perceptible	-	-
0.04	Distinctly Perceptible	-	-
0.1	Strongly Perceptible	Fragile buildings	-
0.12	-	-	Buildings extremely susceptible to vibration damage
0.2	-	-	Non-engineered timber and masonry buildings
0.25	-	Historic and some old buildings	-
0.3	-	Older residential structures	Engineered concrete and masonry (no plaster)
0.4	Severe	-	-

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.5	-	New residential structures, Modern industrial/commercial buildings	Reinforced-concrete, steel, or timber (no plaster)
<small>PPV = peak particle velocity; in/sec = inches per second; FTA = Federal Transit Administration Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual, 2020 and Federal Transit administration; Transit Noise and vibration Assessment Manual, 2018.</small>			

REGULATORY FRAMEWORK

To limit population exposure to physically or psychologically damaging as well as intrusive noise levels, the Federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

STATE

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.

LOCAL

City of San José General Plan

The San José General Plan identifies goals, policies, and implementations in the Noise Element. The Noise Element provides a basis for comprehensive local programs to regulate environmental noise and protect citizens from excessive exposure. **Table 3.6-4: Land-Use Compatibility Guidelines for Community Noise in San José**, highlights five land-use categories and the outdoor noise compatibility guidelines.

Table 3.6-4: Land-Use Compatibility Guidelines for Community Noise in San José

Land-Use Category	Exterior Noise Exposure (DNL), in dBA		
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³
Residential, Hotels and Motels, Hospitals, and Residential Care	Up to 60	>60 to 75	>75
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	Up to 65	>65 to 80	>80
Schools, Libraries, Museums, Meeting Halls, Churches	Up to 60	>60 to 75	>75
Office Buildings, Business Commercial, and Professional Offices	Up to 70	>70 to 80	>75
Sports Area, Outdoor Spectator Sports	Up to 70	>70 to 80	>65
Public and Quasi-Public Auditoriums, Concert Halls, Amphitheaters	N/A	>55 to 70	>70
<p>1. Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction. There are no special noise insulation requirements.</p> <p>2. Conditionally Acceptable – New construction should be undertaken only after a detailed analysis of the noise reduction requirement is conducted and needed noise insulation features included in the design.</p> <p>3. Normally Unacceptable – New construction should be discouraged and may be denied as inconsistent with the General Plan and City Code. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.</p> <p>4. Outdoor open space noise standards do not apply to private balconies/patios.</p>			
Source: City of San José General Plan, 2014.			

The San José General Plan includes the following policies for noise:

Policy EC – 1.1: Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review

Policy EC – 1.2: Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level

- Policy EC – 1.3: Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
- Policy EC – 1.6: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.
- Policy EC – 1.7: Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:
- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.
- For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a Noise Disturbance Coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.
- Policy EC – 1.13: Update noise limits and acoustical descriptors in the Zoning Code to clarify noise standards that apply to land uses throughout the City.
- Policy EC – 2.3: Require new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or building that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to: excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional that verifies that there will

be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

City of San José Municipal Code

According to San José Municipal Code, Section 20.100.450, construction hours within 500 feet of a residential unit are limited to the hours of 7:00 AM to 7:00 PM on Monday through Friday, unless otherwise allowed in a Development Permit or other planning approval. The Municipal Code does not establish quantitative noise limits for construction activities in the City. **Table 3.6-5: City of San José Zoning Ordinance Noise Standards** shows the San José standards for maximum noise level at the property line.

Table 3.6-5: City of San José Zoning Ordinance Noise Standards

Land Use Types	Maximum Noise Level in Decibels at Property Line
Industrial use adjacent to a property used or zoned for residential purposes	55
Industrial use adjacent to a property used or zoned for commercial purposes	60
Industrial use adjacent to a property used or zoned for industrial or use other than commercial or residential purposes	70

Source: City of San José Municipal Code section 20.50.300.

ENVIRONMENTAL SETTING

EXISTING NOISE SOURCES

The City of San José is impacted by various noise sources. Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise in most communities. Other sources of noise are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise.

To determine ambient noise levels in the Project area, four short-term (10-minute) noise measurements and one long-term (24-hour) noise measurements were taken using a Larson Davis SoundExpert LxT Type I integrating sound level meter on November 10 and November 11, 2021; refer to Appendix K for existing noise measurement data. See **Figure 3.6-1: Noise Measurement Location** for locations of noise measurements taken.

The noise measures are shown in **Table 3.6-6: Noise Measurements**. Short-term measurement 1 (ST-1) was taken to represent the ambient noise level at the residential uses east of the Project site on Flickinger Avenue, ST-2 and ST-3 were taken to represent existing noise levels at the industrial uses to the west of the Project site, and ST-4 was taken to represent the existing noise level at the industrial uses to the east on Automation Parkway. The long-term measurement 1 (LT-1) was taken to represent existing ambient noise levels along Flickinger Avenue. The primary noise sources during the noise measurements were traffic along Qume Road, McKay Drive, Flickinger Avenue, and stationary noise at residential and industrial operations nearby. These noise measurements are taken during non-peak traffic hours to capture the ambient noise levels without traffic noise. **Table 3.6-6** provides the ambient noise levels measured at these locations.

Table 3.6-6: Noise Measurements

Site No.	Location	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)	L _{peak} (dBA)	Time	Date
ST-1	1890 Flickinger Avenue	57.0	40.4	70.5	96.7	1:19 PM to 1:29 PM	11/20/2021
ST-2	2360 Qume Drive	61.9	46.9	80.0	96.3	1:01 PM to 1:11 PM	11/20/2021
ST-3	1980 Lundy Avenue	58.3	46.6	75.7	98.9	12:48 PM to 12:58 PM	11/10/2021
ST-4	1750 Automation Parkway	65.1	43.9	79.6	102.6	12:29 PM to 12:39 PM	11/10/2021
LT-1	1890 Flickinger Avenue	52.5	36.7	81.0	104.4	1:43 PM to 3:37 PM	11/10/2021 & 11/11/2021

Source: Noise Measurements taken by Kimley-Horn on November 10-11, 2021.



Source: Google Earth, 2022

Figure 3.6-1: Noise Measurement Location
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EXISTING MOBILE-SOURCE NOISE

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and existing traffic volumes from the Project Transportation Analysis (Kimley-Horn 2022). The noise prediction model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (also referred to as energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data indicates that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along roadway segments in proximity to the Project site are included in **Table 3.6-7: Existing Traffic Noise**. The table shows the existing average daily trips (ADT) on the nearby roadway segments and the resulting day-night noise level (dBA DNL).

Table 3.6-7: Existing Traffic Noise

Roadway Segment	Daily Trips (ADT)	Noise Level (dBA DNL ¹)
Qume Drive		
Commerce to Fortune	2,200	57.7
Commerce Drive		
Lundy to Qume	980	54.2
Concourse Drive		
Lundy to Qume	2,340	58.0
Fortune Drive		
Lundy to Qume	3,280	59.4
Lundy Avenue		
Trade Zone to Murphy	18,380	68.0
ADT = average daily trips; dBA = A-weighted decibels; DNL = day-night noise level		
1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.		
Source: Based on data from the Transportation Analysis (Appendix L). Refer to Appendix K for traffic noise modeling assumptions and results.		

The existing mobile noise in the Project area are generated along Qume Drive, which is west of the Project site, and McKay Drive which is southeast of the Project site.

EXISTING STATIONARY-SOURCE NOISE

The primary sources of stationary noise in the Project vicinity are those associated with the operations of nearby residential uses to the east of the site and existing mixed-used commercial and industrial surrounding of the Project site. The noise associated with these sources may represent a single-event noise occurrence, short-term noise, or long-term/continuous noise.

SENSITIVE RECEPTORS

As discussed in **Table 3.1-1: Nearest Sensitive Receptors to the Project Site** and **Figure 3.1-1: Sensitive Receptor Location Map** above, the nearest sensitive receptors to the Project site include single- and multi-family residences, educational facilities, and recreational facilities to the east and southeast.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a noise and vibration impact is considered significant if the Project would:

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

EVALUATION METHODOLOGY

Construction

Construction noise estimates are based upon noise levels on typical noise levels generated by construction equipment published by the Federal Transit Administration (FTA) and FHWA. Construction noise is assessed in dBA L_{eq} . This unit is appropriate because L_{eq} can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period. The Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) (FTA Noise and Vibration Manual) identifies a maximum 1-hour noise level standard of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses for short-term construction activities. Maximum 8-hour noise level standard of 80 dBA L_{eq} at residential uses, 85 dBA L_{eq} at commercial uses, and 90 dBA L_{eq} at industrial uses for short-term construction activities.

Reference noise levels are used to estimate noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Construction noise level estimates do not account for the presence of intervening structures or topography, which may reduce noise levels at receptor locations. The modeled exterior noise levels include PDF NOI-1 through PDF NOI-3. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual temporary construction noise.

Operations

The analysis of the existing and future noise environments is based on noise prediction modeling and empirical observations. Reference noise level data are used to estimate the Project operational noise impacts from stationary sources. Noise levels are collected from field noise measurements and other published sources from similar types of activities are used to estimate noise levels expected with the

Project's stationary sources. The reference noise levels are used to represent a worst-case noise environment as noise level from stationary sources can vary throughout the day.

Stationary source operational noise is evaluated based on the standards within the City's Municipal Code. The traffic noise levels in the Project vicinity were calculated using the FHWA Highway Noise Prediction Model (FHWA-RD-77-108).

Vibration

Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment, obtained from FTA published data for construction equipment. Potential groundborne vibration impacts related to structural damage and human annoyance were evaluated, considering the distance from construction activities to nearby land uses and typically applied criteria for structural damage and human annoyance.

NOI-1 *Would the Project result in generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant Impact

CONSTRUCTION

Project construction is expected to last for a period of 18 months. While the total Project construction timeline is 18 months, the proposed Project would not result in more than 12 months of substantial noise generating construction activities such as demolition, grading, and building framing. These more intensive construction activities would last approximately 8 months while the less noise intensive construction phases such as site preparation, building construction, paving, and architectural coating would last approximately 10 months. Excavation, cut, and fill would be required as part of construction and soil hauling would be required for approximately 5,000 cubic yards (cy) of imported soil. The Project does not propose pile driving during construction.

The Project site is located within 500 feet of residential uses to the east and 200 feet from industrial uses north, south, and west of the site. As noted in the Project description, the Project includes a request for extended construction hours, beyond 7:00 AM to 7:00 PM, Monday through Friday which would include conducting normal construction activities on Saturdays from 8:00 AM to 5:00 PM, and performing concrete pours during nighttime hours (7:00 PM to 7:00 AM). The nighttime concrete pours would occur on up to 30 nights for Building 1, 25 nights for Building 2, 15 nights for Building 3, and 15 nights for Building 4. The nighttime concrete pours would utilize the following construction equipment: concrete mixer, concrete pump, concrete vibrator, generator, and air compressor.

Construction activities associated with development of the Project would include some demolition, site preparation, grading, paving, building construction, and architectural coating. Such activities would require graders, scrapers, and tractors during demolition and site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during

architectural coating. Grading and excavation phases of Project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. Only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute.

Noise impacts for mobile construction equipment are typically assessed as emanating from the center of the equipment activity or construction site.¹⁶ For the proposed Project, this center point would be approximately 480 feet from the nearest sensitive receptor property line. As shown in **Table 3.6-8: Typical Construction Noise Levels**, noise levels would be below 68 dBA at a distance of 480 feet from the center of the Project site. The highest anticipated construction noise level of 68 dBA at 480 feet is expected to occur during the demolition phase (jack hammer).

Table 3.6-8: Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) from Source ¹	
	50 feet (reference level)	480 feet ³
Air Compressor	80	60
Backhoe	80	60
Compactor	82	62
Concrete Mixer	85	65
Concrete Pump	82	62
Concrete Vibrator	76	56
Crane, Mobile	83	56
Dozer	85	63
Generator ²	56	37
Grader	85	65
Impact Wrench	85	65
Jack Hammer	88	68
Loader	80	60
Paver	85	65
Pneumatic Tool	85	65
Pump	77	57
Roller	85	65
Saw	76	56
Scarifier	83	63
Scraper	85	65

¹⁶ For the purposes of this analysis, the construction area is defined as the center of the project site per the methodology in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018). Although some construction activities may occur at distances closer than 480 feet from the nearest properties, construction equipment would be dispersed throughout the project site during various construction activities. Therefore, the center of the project site represents the most appropriate distance based on the sporadic nature of construction activities.

Shovel	82	62
Truck	84	64
<p>1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1 + 20\log(d_1/d_2)$. Where: $QWdBA_2$ = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance.</p> <p>2. Generator would include CAT XQ60 Rental Generator Set.</p> <p>3. For the purposes of this analysis, the construction area is defined as the center of the Project site per the methodology in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018). Although some construction activities may occur at distances closer than 480 feet from the nearest properties, construction equipment would be dispersed throughout the Project site during various construction activities. Therefore, the center of the Project site represents the most appropriate distance based on the sporadic nature of construction activities.</p>		
Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , September 2018.		

The noise levels calculated in **Table 3.6-9: Project Construction Noise Levels**, show estimated exterior construction noise at the closest receptors. The modeled exterior noise levels include PDF NOI-1 through PDF NOI-3. Based on calculations using the RCNM model, construction noise levels would range from approximately 48.0 dBA L_{eq} and 65.8 dBA L_{eq} at the nearest sensitive receptors. **Table 3.6-9: Project Construction Noise Levels** shows combined construction equipment noise levels at the nearest receptors.

Table 3.6-9: Project Construction Noise Levels

Construction Phase	Receptor Location			Modeled Exterior Noise Level (dBA L_{eq}) ^{2,3}	Noise Threshold (dBA L_{eq}) ⁴	Exceeded?
	Land Use	Direction	Distance (feet) ¹			
Demolition	Residential (1 st & 2 nd Floors)	East	480	49.9	80	No
	Residential (3 rd Floor)	East	480	64.9	80	No
	Industrial	West	275	69.8	90	No
Site Preparation	Residential (1 st & 2 nd Floors)	East	480	48.0	80	No
	Residential (3 rd Floor)	East	480	63.0	80	No
	Industrial	West	275	69.8	90	No
Grading	Residential (1 st & 2 nd Floors)	East	480	50.8	80	No
	Residential (3 rd Floor)	East	480	65.8	80	No
	Industrial	West	275	70.6	90	No
Building Construction	Residential (1 st & 2 nd Floors)	East	480	49.4	80	No
	Residential (3 rd Floor)	East	480	64.4	80	No
	Industrial	West	275	69.3	90	No
Paving	Residential (1 st & 2 nd Floors)	East	480	60.1	80	No
	Residential (3 rd Floor)	East	480	60.1	80	No
	Industrial	West	275	64.9	90	No
Architectural Coating	Residential (1 st & 2 nd Floors)	East	480	60.1	80	No
	Residential (3 rd Floor)	East	480	60.1	80	No
	Industrial	West	275	64.9	90	No

Notes:

1. Distance is from the nearest receptor to the main construction activity area on the Project site. Not all equipment would operate at the closest distance to the receptor.
2. Modeled noise levels conservatively assume the simultaneous operation of all pieces of equipment.
3. Modeled exterior noise level includes PDF NOI-3 (use of a temporary noise barrier) which would only affect the residences on the first and second floors of the multi-family units across the BART tracks. The temporary noise barrier would have a sound transmission class of 25 or greater and would attenuate noise levels by 25 dB. This analysis conservatively takes credit for 15 dB.
4. The FTA Noise and Vibration Manual establishes construction noise standards of 80 dBA $L_{eq(8-hour)}$ for residential uses and 90 dBA $L_{eq(8-hour)}$ for commercial and industrial uses.

Source: Federal Highway Administration, *Roadway Construction Noise Model*, 2006. Refer to **Appendix K** for noise modeling results.

As shown in **Table 3.6-9: Project Construction Noise Levels**, the loudest noise levels would be 65.8 dBA L_{eq} at the nearest residential uses and 70.6 dBA L_{eq} at the nearest industrial uses, which would not exceed the FTA's construction noise standards of 80 dBA L_{eq} and/or 90 dBA L_{eq} .

The City considers a significant construction noise impact to occur if the Project is located within 500 feet of a residential use or 200 feet of a commercial or office use and would involve substantial noise-generation activities continuing for over 12 months. As stated above the Project's substantial noise-generating construction phases would not exceed 12 months, therefore the Project would not have a significant construction noise impact per General Plan Policy EC-1.7. Construction noise may be generated by large trucks moving materials to and from the Project site. Large trucks would be necessary to deliver building materials as well as remove dump materials. Based on the California Emissions Estimator Model (CalEEMod) default assumptions for this Project, as analyzed in Qume and Commerce Air Quality Assessment (Appendix C), the Project would generate the highest number of daily trips during the demolition and construction phases. The model estimates that the Project would generate up to 15 worker trips and 103 daily hauling trips (5,756 hauling trips over 56 days) for demolition for a total of approximately 118 daily vehicle trips during demolition. During the site preparation phase there would be approximately 18 daily worker trips. Building construction would have 600 daily worker trips and 234 daily vendor trips. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and vehicle mix do not also change) would result in a noise level increase of 3 dBA. Lundy Avenue between Trade Zone to Murphy has an average daily trip volume of 18,380 vehicles. Therefore, a maximum of 834 daily Project construction trips (total of 600 daily worker trips and 234 daily vendor trips) would not double the existing traffic volume per day. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable (Caltrans, 2013). Generally, traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, construction related traffic noise would not be noticeable and would not occur for a period exceeding 12 months; therefore, the Project would not create a significant noise impact. Construction noise impacts are less than significant.

Section 20.100.450 of the Municipal Code limits construction hours within 500 feet of a residential unit are limited to the hours of 7:00 AM to 7:00 PM on Monday through Friday, unless otherwise allowed in a Development Permit or other planning approval. As discussed in Section 2.3 of this Draft EIR the Project includes PDFs NOI-1 through NOI-3 which would minimize construction noise, including between 7:00 PM and 7:00 AM and on weekends ("off hours construction"). All construction equipment would be equipped with properly operating and maintained mufflers and other state required noise attenuation devices, helping to reduce noise at the source per PDF NOI-1. PDF NOI-2 would ensure work during extended construction hours would be limited, and that the Applicant must implement measures to reduce noise impacts at nearby sensitive receptors. PDF NOI-3 would require the Project to erect a temporary noise

barrier, prior to construction, in areas where residences are located within 500 feet of construction. These PDFs would help to minimize construction noise effects to sensitive receptors.

OPERATIONS

Implementation of the Project would create sources of noise in the Project vicinity. However, the Project would replace an existing site with similar operational noise levels. The major noise sources associated with the Project that would potentially impact existing and future nearby residences include the following:

- Off-site traffic noise;
- Mechanical equipment (i.e., trash compactors, air conditioners, etc.);
- Delivery trucks on the Project site, and approaching and leaving the loading areas;
- Activities at the loading areas (i.e., maneuvering and idling trucks, loading/unloading, and equipment noise);
- Parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and
- Landscape maintenance activities.

The closest sensitive receptor property lines are located approximately 140 feet to the east. The City of San José stationary source exterior Zoning Ordinance Noise Standards for industrial areas adjacent to residential uses is 55 dBA L_{eq} . Per General Plan Policy EC-1.1, land use compatibility standard for business commercial areas is up to 70 dBA DNL.

Traffic Noise

Implementation of the Project would generate traffic volumes along study roadway segments. The Project is expected to generate 2,035 average daily trips, however the existing uses on-site generate 3,565 average daily trips. This is partially due to the existing and proposed uses of the building. The proposed warehouse use would generate less trips than the existing research and development use. Therefore, the proposed Project would result in a net of 0 daily trips. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable.¹⁷ Generally, traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. General Plan Policy EC-1.2 limits noise levels increase by 5 dBA where would remain normally acceptable and 3 dBA where noise levels near sensitive receptors would equal or exceed normally acceptable. Therefore, permanent increases in ambient noise levels of less than 3 dBA are considered to be less than significant.

As shown in **Table 3.6-10: Existing and Project Traffic Noise**, the existing traffic-generated noise level on Project area roadways is between 54.2 dBA L_{dn} and 68.0 dBA L_{dn} at 100 feet from the centerline. As previously described, L_{dn} is 24-hour average noise level with a 10 dBA “weighting” added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the evening and nighttime, respectively.

¹⁷ Caltrans, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013. Available at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>

Traffic noise levels for roadways primarily affected by the Project were calculated using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108). Traffic noise modeling was conducted for conditions with and without the Project, based on traffic volumes (Appendix L). As noted in **Table 3.6-10**, Project noise levels 100 feet from the centerlines of the noted roadways would range from 55.9 dBA to 68.3 dBA. The Project generated trips would have the highest increase of 1.7 dBA on Commerce Drive. However, the 1.7 dBA DNL increase is under the perceptible 3.0 dBA noise level increase per General Plan EC – 1.3. Additionally, this analysis conservatively does not take reductions for the baseline conditions. Therefore, the Project would not have a significant impact on existing traffic noise levels.

Table 3.6-10: Existing and Project Traffic Noise

Roadway Segment	Existing Conditions		With Project		Change from No Project Conditions	Significant Impact?
	ADT	dBA DNL ¹	ADT	dBA DNL ¹		
Qume Drive						
Commerce to Fortune	2,200	57.7	2,860	58.8	1.1	No
Commerce Drive						
Lundy to Qume	980	54.2	1,440	55.9	1.7	No
Concourse Drive						
Lundy to Qume	2,340	58.0	3,110	59.2	1.2	No
Fortune Drive						
Lundy to Qume	3,280	59.4	4,030	60.3	0.9	No
Lundy Avenue						
Trade Zone to Murphy	18,380	68.0	19,980	68.3	0.3	No
ADT = average daily trips; dBA = A-weighted decibels; DNL= day-night noise levels 1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography. Source: Based on data from the Transportation Analysis (Appendix L). Refer to Appendix K for traffic noise modeling assumptions and results.						

Table 3.6-11: Background and Background Plus Project Traffic Noise, shows the background conditions traffic. Per the Transportation Analysis (Appendix L), Background conditions would include twelve other approved projects that were modeled as additional to the baseline 2021 volumes. As shown in **Table 3.6-11**, Background roadway noise levels with the Project would range from 56.5 dBA to 69.2 dBA. Project traffic would traverse and disperse over Project area roadways, where existing ambient noise levels already exist. Future development associated with the Project would result in traffic on adjacent roadways, thereby contributing vehicular noise near existing and proposed land uses. However, as discussed above, this analysis did not take reductions for the existing use on-site that generates mobile noise. The Project would not result in noise level increases above 3.0 dBA. Therefore, impacts are less than significant.

Table 3.6-11: Background and Background Plus Project Traffic Noise

Roadway Segment	Background		With Project		Change from No Project Conditions	Significant Impact?
	ADT	dBA DNL ¹	ADT	dBA DNL ¹		
Qume Drive						
Commerce to Fortune	2,210	57.7	2,870	59.5	1.8	No
Commerce Drive						
Lundy to Qume	980	54.2	1,440	56.5	2.3	No
Concourse Drive						
Lundy to Qume	2,350	58.0	3,120	59.9	1.9	No
Fortune Drive						
Lundy to Qume	3,300	59.4	4,050	61.0	1.6	No
Lundy Avenue						
Trade Zone to Murphy	19,580	68.2	21,180	69.2	1.0	No
ADT = average daily trips; dBA = A-weighted decibels; DNL= day-night noise levels 1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography. Source: Based on data from the Transportation Analysis (Appendix L). Refer to Appendix L for traffic noise modeling assumptions and results.						

Stationary Noise Sources

Implementation of the Project would generate sources of noise in the Project vicinity from mechanical equipment, truck loading areas, parking lot noise, and landscape maintenance. **Table 3.6-12** shows the noise levels generated by various stationary noise sources and the resulting noise level at the nearest receiver. **Table 3.6-12** also show the Project's compliance with GP Policy EC-1.1 and EC-1.2 as well as the Municipal Code. Each stationary source is discussed below.

Mechanical Equipment

Regarding mechanical equipment, the Project would generate stationary-source noise associated with heating, ventilation, and air conditioning (HVAC) units. HVAC units typically generate noise levels of approximately 52 dBA at a distance of 50 feet.¹⁸ Additionally, the Project would include backup generators. **Table 3.6-12** shows that mechanical equipment would not exceed the City's General Plan standards in Policy EC-1.1 and Policy EC-1.2.

Loading Area Noise

The Project is an industrial development that would include deliveries. The primary noise associated with deliveries is the arrival and departure of trucks. Operations of proposed Project would potentially require a mixture of deliveries from vans, light trucks, and heavy-duty trucks. Normal deliveries typically occur during daytime hours. During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting' braking activities; backing up toward the docks/loading areas; dropping down the dock ramps; and maneuvering away from the docks. The

¹⁸ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.

Project is largely surrounded by industrial uses. The closest that the loading area would be located to sensitive receptors would be approximately 650 feet west. While there would be temporary noise increases during truck maneuvering and engine idling, these impacts would be of short duration and infrequent. Typically, heavy truck operations generate a noise level of 64 dBA at a distance of 50 feet. **Table 3.6-12** shows that truck and loading area noise would not exceed the City's General Plan standards in Policy EC-1.1 and Policy EC-1.2.

Parking Areas

Traffic associated with parking areas is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Parking lot noise can also be considered a "stationary" noise source. The instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 53 to 61 dBA at a distance of 50 feet and may be an annoyance to noise-sensitive receptors. Conversations in parking areas may also be an annoyance to sensitive receptors. Sound levels of speech typically range from 33 dBA at 48 feet for normal speech to 50 dBA at a distance of 50 feet for very loud speech. It should be noted that parking lot noise are instantaneous noise levels compared to noise standards in the DNL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower. **Table 3.6-12** shows that parking area noise as a result of the Project would not exceed the City's General Plan standards in Policy EC-1.1 and Policy EC-1.2

Landscape Maintenance Activities

Development and operation of the Project includes new landscaping that would require periodic maintenance. Noise generated by a gasoline-powered lawnmower is estimated to be approximately 70 dBA at a distance of five feet. Landscape maintenance activities would be 50 dBA at 50 feet away and 40.5 dBA at the closest sensitive receptor approximately 150 feet from the nearest proposed landscaping area. Maintenance activities would operate during daytime hours for brief periods of time as allowed by the City Municipal Code and would not permanently increase ambient noise levels in the Project vicinity and would be consistent with activities that currently occur at the surrounding uses. **Table 3.6-12** shows that landscape maintenance noise would not exceed the City's General Plan standards in Policy EC-1.1 and Policy EC-1.2

Table 3.6-12: Operational Noise Levels

Nearest Land Use	Distance (feet) ¹	Reference Level at 50 ft (dBA)	Policy EC-1.1			Policy EC-1.2			
			Noise Level at Receiver	Exterior Noise Standard	Exceed Threshold	Ambient Noise Level (L _{eq})	Combined Noise at Receiver	Incremental Increase (dBA) ¹⁰	Exceed Threshold
Mechanical Equipment									
Industrial	100	52 dBA ²	46.0 dBA	70 dBA ⁵	NO	65.1 dBA ⁷	65.2 dBA	0.1	NO
Residences	775		28.2 dBA	60 dBA ⁶	NO	57 dBA ⁹	57.0 dBA	0.0	NO
Loading Area									
Industrial	300	64 dBA ²	48.4 dBA	70 dBA ⁵	NO	65.1 dBA ⁷	65.2 dBA	0.1	NO
Residences	650		41.7 dBA	60 dBA ⁶	NO	57 dBA ⁹	57.1 dBA	0.1	NO
Parking Area									
Industrial	650	61 dBA ³	38.7 dBA	70 dBA ⁵	NO	65.1 dBA ⁷	65.1 dBA	0.0	NO
Residences	675		38.4 dBA	60 dBA ⁶	NO	57 dBA ⁹	57.1 dBA	0.1	NO
Landscape Maintenance									
Industrial	150	61 dBA ⁴	40.5 dBA	70 dBA ⁵	NO	65.1 dBA ⁷	65.1 dBA	0.0	NO
Residences	150		40.5 dBA	60 dBA ⁶	NO	57 dBA ⁹	57.1 dBA	0.1	NO
<p>1. The distance is from the location of the operational noise source to the sensitive receptor property line.</p> <p>2. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, <i>Noise Navigator Sound Level Database with Over 1700 Measurement Values</i>, July 6, 2010.</p> <p>3. Kariel, H. G., <i>Noise in Rural Recreational Environments</i>, Canadian Acoustics 19(5), 3-10, 1991.</p> <p>4. U.S. EPA, <i>Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances</i>, 1971.</p> <p>5. City of San José Municipal Code section 20.50.300 (Table 20-135), which establishes industrial use noise standards of 55 dBA when adjacent to residential zones, 60 dBA when adjacent to commercial zones, and 70 dBA when adjacent to industrial zones.</p> <p>6. City of San José General Plan Policy EC-1.1 establishes Normally acceptable noise standards of 60 dBA for residential and institutional uses and 70 dBA for commercial office uses.</p> <p>7. Noise Measurement ST-4, which is representative of ambient noise levels along Automation Parkway.</p> <p>8. Noise Measurement ST-3, which is representative of ambient noise levels along Qume Drive.</p> <p>9. Noise Measurement ST-1, which is representative of ambient noise levels at the residential land uses east of the Project site.</p> <p>10. Incremental noise threshold per City of San José General Plan Policy EC-1.2, which establishes incremental noise standards of 5 dBA where noise levels would remain “Normally Acceptable” and 3 dBA where noise levels would equal or exceed the “Normally Acceptable” level for land uses sensitive to increased noise levels. Normally acceptable levels are 60 dBA for residential uses. Although the normally acceptable standard for industrial and commercial office uses is 70 dBA, it is not considered a land use sensitive to increased noise levels per Policy EC-1.2.</p>									

As shown in **Table 3.6-12**, stationary sources would not exceed the Land Use Compatibility Standards from GP Policy EC-1.1 or the incremental noise increases per GP Policy EC-1.2 at the adjacent industrial use and nearest residential property. According to the GP Policy EC-1.3, if a nonresidential land use is built adjacent to a sensitive residential receptor then noise from the new use must be mitigated to below 55 dBA. Although there are residential land uses to the east of the Project site, there is a BART railroad track in between the Project site and the residential land uses. Therefore, the residential uses are not adjacent to the Project site and the threshold of 55 dBA would not apply.

Additionally, noise levels would be further attenuated by intervening terrain and structures such as the existing BART noise wall adjacent to the sensitive receptors. The existing noise wall would further reduce Project operational noise levels. Impacts from mechanical equipment, loading area, parking area, and landscape maintenance would be less than significant. Therefore, the Project would not result in a significant impact to operational noise.

NOI-2	<p><i>Would the project result in generation of excessive groundborne vibration or groundborne noise levels?</i></p> <p><i>Less than Significant Impact</i></p>
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CONSTRUCTION

Increases in groundborne vibration levels attributable to the Project would be primarily associated with construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

Construction vibration would be considered impactful if it resulted in human annoyance or building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time (approximately 75 Vdb). Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layer between vibration source and receiver.

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. The City of San José General Plan Policy EC-2.3 includes a vibration limit of 0.08 in/sec

PPV for sensitive historic structures and 0.20 in/sec PPV for normal conventional construction. The surrounding structures are not listed as historical resources. Therefore, the 0.20 in/sec PPV threshold could be utilized.

Table 3.6-13, lists vibration levels at 25 feet, 50 feet, and 75 feet for typical construction equipment. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 3.6-13**, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 to 0.089 in/sec PPV at 25 feet from the source of activity. The nearest off-site structure is approximately 75 feet from the Project site and would not experience perceptible vibration levels. The nearest sensitive receptors are further than 75 feet and therefore would have lower levels of vibration.

Table 3.6-13: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec) Reference Level	Peak Particle Velocity at 50 Feet (in/sec) ^{1, 2}	Peak Particle Velocity at 75 Feet (in/sec) ^{1, 2}
Large Bulldozer	0.089	0.032	0.017
Loaded Trucks	0.076	0.032	0.017
Rock Breaker	0.059	0.027	0.015
Jackhammer	0.035	0.012	0.007
Small Bulldozer/Tractors	0.003	0.001	0.001

1. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.

2. PPV levels have been adjusted based on the site's soil type per the *Caltrans Transportation and Construction Vibration Guidance Manual*, September 2013.

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

As shown in **Table 3.6-13**, the highest vibration levels are achieved with the large bulldozer operations. This construction activity is expected to take place during grading. Project construction would not be closer than 75 feet from the closest structure. Therefore, construction equipment vibration velocities would not exceed the FTA's 0.20 PPV threshold. In general, other construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. Therefore, vibration impacts associated with the Project would be less than significant.

OPERATIONS

The Project would not generate groundborne vibration that could be felt at surrounding uses. Project operations would not involve railroads or substantial heavy truck operations, and therefore would not result in vibration impacts at surrounding uses. As a result, impacts from vibration associated with Project operation would be less than significant.

NOI-3 ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

Less Than Significant Impact

The nearest airport to the Project site is the Norman Y. Mineta San José International Airport located approximately 2.7 miles southwest of the Project site. The Project site lies outside of the 65 dBA CNEL noise contours shown in the Norman Y. Mineta San José International Airport Master Plan Update Project report published in October 2019.¹⁹ Although aircraft-related noise would occasionally be audible at the Project site, exterior noise levels resulting from aircraft would be compatible with the proposed Project. Therefore, the Project would not expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

¹⁹ City of San José Norman Y. Mineta San José International Airport Master Plan Update, *Noise Assessment for the Master Plan Environmental Impact Report*, October 2019.

3.7 TRANSPORTATION

The transportation impact analysis is based upon a Transportation Analysis prepared by Kimley-Horn in February 2022. A copy of this report is attached in Appendix L of this Draft EIR.

ENVIRONMENTAL SETTING

The Project site is currently developed with an industrial/warehouse building and access is provided via Qume and Commerce Drive. Existing traffic operations were evaluated at the study intersections during AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak hour turning movement counts collected for the Local Transportation Analysis (Appendix L).

REGIONAL AND LOCAL ACCESS

The following local and regional roadways provide access to the Project site:

Qume Drive is a local connector street in the north-south direction between Commerce Drive and Fortune Drive. Near the Project site, Qume Drive is a two-lane road with a two-way left-turn lane that provides direct access to commercial and industrial businesses. On-street parking is prohibited along Qume Drive and the road does not have sidewalk access for pedestrians. The proposed Qume & Commerce Project is located in between Concourse Drive and Commerce Drive

Commerce Drive is a local connector street in the east-west direction and provides direct access to the proposed Project site. Near the Project site, Commerce Drive is a two-lane road with a two-way left turn lane. On-street parking is prohibited along Commerce Drive and there are no existing continuous sidewalk facilities for pedestrians.

Lundy Avenue is a four-lane divided arterial in the north-south direction that provides access to various residential, commercial, and industrial businesses between Trade Zone Boulevard and Commodore Drive. Lundy Avenue is designated as a City Connector Street. The roadway has a posted speed limit of 40 mph and has sidewalks and Class II bike lanes on both sides of the street.

Trade Zone Boulevard is a four-lane arterial that provides east-west access to various commercial and industrial businesses between Montague Expressway and Capitol Avenue. The roadway is designated as a City Connector Street. Near the Project site, the roadway has a posted speed limit of 40 mph, has sidewalks, and provides Class II bike lanes on both sides of the street.

Brokaw / Murphy Road is a six-lane, east-west city connector street that provides access to the San José airport as well as various commercial and industrial businesses between US 101 and Oakland Road. The roadway is divided by a raised median and provides Class II bike lanes and sidewalk facilities in both directions. Brokaw Road/Murphy Road is designated as a city connector street in the Project vicinity.

Montague Expressway is county route G4 that operates in the east-west direction, extending from Interstate 680 in Milpitas to Highway 101 in Santa Clara. East of Capitol Avenue, Montague Expressway is an eight-lane divided road that provides direct access to major regional facilities including I-880 and I-680 as well as regional destinations such as the Milpitas Great Mall. West of Capitol Avenue, Montague Expressway is a six-lane divided road that serves as an access corridor for commercial and industrial developments. The road does not provide on-street parking but provides a Class II bike lane and some sidewalk facilities.

Interstate 680 (I-680) is primarily a six-lane freeway that is aligned in a north-south orientation between Interstate 80 in Oakland and Highway 101 in San José at which it transitions into Interstate 280 to San Francisco. Access to the Project site to and from I-680 is provided by nearby ramps at Capitol Avenue and Hostetter Road.

Interstate 880 (I-880) is primarily a six-lane freeway that is aligned in a north-south orientation between Interstate 80 in Oakland and Interstate 280 in San José at which it transitions into Highway 17 to Santa Cruz. Access to the Project site to and from I-880 is provided by nearby ramps at Montague Expressway and Brokaw Road.

PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian activity within the Project study area is sparse. Connected sidewalks at least six feet wide are available along all major roadways in the study area with adequate lighting and signing. At signalized intersections, marked crosswalks, Americans with Disabilities Act (ADA) standard curb ramps, and count down pedestrian signals provide improved pedestrian visibility and safety.

Bicycle facilities in the area include Montague Expressway, Trade Zone Boulevard, Capitol Avenue, Oakland Road, Lundy Avenue, Murphy Road, and Hostetter Road which provide Class II bike lanes with buffered striping to separate the vehicle and bike travel way. Some of these corridors feature green paint markings in potential conflict areas and at signalized intersections. Bicycle parking in the Project study area is limited to private commercial and industrial lots.

Near the Project site, Qume Drive and Commerce Drive does not provide sidewalk or bicycle facilities for pedestrians and cyclists. Overall, the existing pedestrian and bicycle facilities near the Project have inadequate connectivity to provide pedestrians and bicyclists with designated routes to the surrounding land uses.

The San José Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the Project study area and the following facility improvements would benefit the Project.

- Class II Bike Lanes
 - McKay Drive/Automation Parkway from Lundy Avenue to Hostetter Road Class III Bike Boulevard
- Class III Bike Boulevard
 - Lundy Place/ Trimble Road from Trade Zone Boulevard to Piedmont Road
- Class IV Protected Bike Lanes
 - Montague Expressway from E Trimble Road to Trade Zone Boulevard
 - Trade Zone Boulevard from Montague Expressway to Piedmont Road
 - Lundy Avenue from Trade Zone Boulevard to Mabury Road
 - Murphy / Hostetter Road from I-880 to Capitol Avenue

TRANSIT SERVICE

Transit services in the Project study area include light rail, shuttles, and buses provided by the Santa Clara Valley Transportation Authority (VTA). Per the updated October 1, 2021²⁰ service schedule, the Project study area is served by the following major transit routes.

- Local Bus Route 20
 - Milpitas BART – Sunnyvale Transit Center
 - Local service every 30-60 minutes on weekdays and weekends
 - Nearest transit stop to Project – Montague Expwy / Trade Zone Blvd intersection
- Local Bus Route 44
 - Milpitas BART – McCarthy Ranch via Tasman & Alder
 - Local service every 30-60 minutes on weekdays and weekends
 - Nearest transit stop to Project – Montague Expwy / Trade Zone Blvd intersection
- Frequent Bus Route 60
 - Milpitas BART – Winchester Station via SJC Airport
 - Local service every 12-15 minutes on weekdays and every 15-30 minutes on weekends
 - Nearest transit stop to Project – Lundy Ave / Concourse Dr
- Frequent Bus Route 77
 - Milpitas BART – Eastridge via King
 - Local service every 12-15 minutes on weekdays and every 15-30 minutes on weekends
 - Nearest transit stop to Project – Lundy Ave / Concourse Dr
- Light Rail Orange Line
 - Mountain View – Alum Rock
 - Nearest transit stop to Project – Milpitas Transit Center and Cropley Station

Most regular bus routes operate on weekdays from early in the morning (5:00 AM to 6:00 AM) until late in the evening (10:00 PM to midnight) and on weekends from early morning (5:00 AM to 6:00 AM) until mid-evening (8:00 PM to 10:00 PM). Bus headways during peak commute periods vary between 12 to 30 minutes. The study area is served by bus routes 20, 44, 60, and 77 in the VTA system which provide local and regional bus service for commuters between San José downtown and major transit destinations in Santa Clara County. These bus routes also provide transit connections to the Valley Fair Transit Center, San José Diridon Station (Caltrain, ACE, Amtrak), Santa Clara Transit Center, VTA Light Rail stations, and Berryessa Transit Center (BART).

Bus stops with benches, shelters, and bus pullout amenities are not provided within 0.5 mile (i.e. walking distance) from the Project site. The nearest transit stop is the Lundy Avenue and Commerce Drive bus stop located approximately 0.14 mile west of the Project site.

²⁰ Note that the routes and service schedules described above are based on October 1, 2021 schedules. At the time that this report was prepared, COVID 19 had affected routes and service schedules and is not reflective of typical operations.

REGULATORY FRAMEWORK

REGIONAL

Metropolitan Transportation Commission

Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted the final Plan Bay Area in July 2013 which includes the region's Sustainable Communities Strategy and the most recently adopted Regional Transportation Plan (2040).

Santa Clara Valley Transportation Agency Congestion Management Program

In accordance with California Statute, Government Code 65088, Santa Clara County has established a CMP. The intent of the CMP legislation is to develop a comprehensive transportation improvement program among local jurisdictions that will reduce traffic congestion and improve land use decision-making and air quality. VTA serves as the Congestion Management Agency (CMA) for Santa Clara County and maintains the County's CMP. The CMP requires review of substantial individual projects, which might on their own impact the CMP transportation system. Specifically, the CMP Traffic Impact Analysis measures impacts of a project on the CMP Highway System. Compliance with the CMP requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects.

LOCAL

San José Transportation Impact Policy 5-1

As established in City Council Policy 5-1 "Transportation Analysis Policy" (2018), the City of San José uses vehicle miles traveled (VMT) as the metric to assess transportation impacts from new development under CEQA, as suggested by SB 743. According to the policy, a residential project's transportation impact would be less than significant if the project VMT is 15 percent or more below the existing average citywide per capita VMT. An employment (e.g., office, R&D) project's transportation impact would be less than significant if the project VMT is 15 percent or more below the existing average regional per employee VMT. For industrial projects (e.g., warehouse, manufacturing, distribution), the impact would be less than significant if the project VMT is equal to or less than existing average regional per employee VMT. The threshold for a retail project is whether it generates net new regional VMT, as new retail typically redistributes existing trips and miles traveled as opposed to inducing new travel. If a project's VMT does not meet the established thresholds, mitigation measures would be required, where feasible.

The policy also requires preparation of a Local Transportation Analysis (LTA) to analyze non-CEQA transportation issues, which may include local transportation operations, intersection level of service, site access and circulation, and neighborhood transportation issues such as pedestrian and bicycle access, and to recommend needed transportation improvements.

City of San José Envision San José 2040 General Plan

The City's General Plan includes the following transportation policies applicable to the proposed Project:

- Policy TR-1.1: Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).
- Policy TR-1.2: Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.
- Policy TR-1.4: Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.
- Policy TR-1.5: Design, construct, operate, and maintain public streets to enable safe, comfortable, and attractive access and travel for motorists and for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences.
- Policy TR-1.6: Require that public street improvements provide safe access for motorists and pedestrians along development frontages per current City design standards.
- Policy TR-2.8: Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
- Policy TR-5.3: Development projects' effects on the transportation network will be evaluated during the entitlement process and will be required to fund or construct improvements in proportion to their impacts on the transportation system. Improvements will prioritize multimodal improvements that reduce VMT over automobile network improvements.
- Policy TR-6.1: Minimize potential conflicts between trucks and pedestrian, bicycle, transit, and vehicle access and circulation on streets with truck travel.
- Policy TR-6.5: Design freight loading and unloading for new or rehabilitated industrial and commercial developments to occur off of public streets. In Downtown and urban areas, particularly on small commercial properties, more flexibility may be needed.
- Policy TR-6.7: As part of the project development review process, ensure that adequate off-street loading areas in new large commercial, industrial, and residential developments are provided, and that they do not conflict with adjacent uses, or with vehicle, pedestrian, bicycle, or transit access and circulation.
- Policy TR-8.4: Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.
- Policy TR-8.7: Encourage private property owners to share their underutilized parking supplies with the general public and/or other adjacent private developments.

- Policy TR-8.8: Promote use of unbundled private off-street parking associated with existing or new development, so that the sale or rental of a parking space is separated from the rental or sale price for a residential unit or for non-residential building square footage.
- Policy TR-8.9: Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.
- Policy TR-9.1: Enhance, expand and maintain facilities for walking and bicycling, particularly to connect with and ensure access to transit and to provide a safe and complete alternative transportation network that facilitates non-automobile trips.
- Action TR-10.4: In Tier II, require that a portion of adjacent on-street and City owned off-street parking spaces be counted towards meeting the zoning code’s parking space requirements.
- Policy CD-2.3: Enhance pedestrian activity by incorporating appropriate design techniques and regulating uses in private developments, particularly in Downtown, Urban Villages, Corridors, Main Streets, and other locations where appropriate.
- Policy CD-3.3: Within new development, create a pedestrian friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets.
- Policy CD-3.6: Encourage a street grid with lengths of 600 feet or less to facilitate walking and biking. Use design techniques such as multiple building entrances and pedestrian paseos to improve pedestrian and bicycle connections.

IMPACT ANALYSIS

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, a transportation impact is considered significant if the Project would:

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

The following impact analysis evaluates the Project’s potential to result in transportation impacts.

TRANS-1 *Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant Impact

In accordance with General Plan policies, the proposed Project will facilitate pedestrian and bicycle access and safety. As described in Mitigation Measure TRANS-1, the Project site plan includes a Class I bikeway located along the southeastern portion of Building 3 site to provide access between Commerce Drive and Automation Parkway. The Project would also provide wider sidewalks and improved landscape features along the Commerce Drive and Qume Drive frontages to improve the pedestrian experience as part of Mitigation Measure TRANS-1.

The existing network of sidewalks and crosswalks in the study area are relatively sparse with limited connectivity and walkable routes to nearby bus stops, retail, and other points of interest in the immediate area. In addition, the nearest transit stop to the Project site is the Lundy Avenue and Commerce Drive bus stop located approximately 0.14 mile west of the Project Site. As for bicycle connectivity, bicycle facilities in the area include Montague Expressway, Trade Zone Boulevard, Capitol Avenue, Oakland Road, Lundy Avenue, Murphy Road, and Hostetter Road. Near the Project site, Qume Drive and Commerce Drive do not provide bicycle facilities. Further, portions of Qume Drive lacks sidewalks. Per San José Bike Plan 2025, the Project would likely need to provide a fair share contribution or build out Class IV protected bike lanes along the Project frontages and/or within the study area.

Due to the function and operational characteristics of the proposed Project site with warehouse/distribution buildings, and due to the fact that the Project would redevelop an existing business park site, the Project is not anticipated to add substantial Project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the Project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

For these reasons, the proposed Project is consistent with goals, policies, and programs adopted by the City and VTA and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, there would be a less than significant impact.

TRANS-2 *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less than Significant Impact with Mitigation Incorporated

A vehicle miles traveled (VMT) analysis was performed to evaluate the proposed Project VMT levels against the appropriate thresholds of significance established in Council Policy 5-1 (Appendix I).

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San José VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects. The proposed Project was evaluated in the VMT tool assuming development of 714,491 sf of industrial use. This land use total includes a portion of the site dedicated to office square-foot space which is typical of a warehouse land use. The proposed Project designates approximately

20,000 sf or 2.8% of the total square footage as office land use, and this office allocation is consistent with other recent warehouse developments in the City.

Therefore, although 20,000 square feet of the total development is office use, the whole Project is analyzed as an industrial land use for VMT impact. **Table 3.7-1: Project VMT Analysis** summarizes the VMT analysis.

Table 3.7-1: Project VMT Analysis

Scenario	Industrial VMT per Employee	Exceeds City Threshold and VMT Impact?
City VMT Threshold	14.37	N/A
Existing Conditions	14.86	Yes
Project Conditions	14.82	Yes
Project with VMT Reduction Strategies	13.65	No

Based on the VMT Evaluation tool and the Project's APN, The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 14.86. The proposed Project is anticipated to generate a VMT per employee of 14.82. The evaluation tool estimates that the Project would exceed the City's industrial VMT per employee threshold and would trigger a potential VMT impact.

For projects that would trigger a VMT impact, VMT reduction strategies such as introducing TDM or additional multimodal infrastructure can be used to mitigate the VMT impact which is estimated from research literature and case studies.

Based on the City of San José VMT Evaluation Tool, implementation of several Tier 2 multi-modal infrastructure can reduce the Project's per employee VMT to 13.65, which is below the 14.37 industrial VMT threshold. Therefore, with implementation of Mitigation Measure TRANS-1, impacts would be less than significant.

Impact TRANS-1: Project operations could exceed the City's industrial VMT per employee threshold of 14.37 by 0.45 VMT per employee and could conflict with CEQA Guidelines Section 15064.3, subdivision (b).

Mitigation Measure

TRANS-1 Multimodal Transportation Infrastructure

Prior to the issuance of building permits, the Project applicant shall prepare plans that illustrate the following measures to reduce the Project's VMT per employee by 1.17 VMT per employee, and shall coordinate with the Department of Transportation and the Department of Public Works to incorporate the following:

- Construct an internal bicycle / pedestrian pathway connecting the cul-de-sacs at McKay Drive / Automation Parkway and Commerce Drive / Qume Drive.
- Shift existing curblines along the Commerce Drive and Qume Drive frontages 10 feet inwards to achieve a future 40-foot curb-to-curb width along both streets.

Final plans shall be submitted to and approved by the Department of Transportation and the

Department of Public Works. Improvements shall be constructed prior to the issuance of the final occupancy permit.

Implementation of the mitigations described above will reduce the VMT impacts from 14.82 to 13.65, which is below the VMT threshold of 14.37.

Implementation of Mitigation Measure TRANS-1 would increase multimodal density from 2 intersections per square mile to 3 intersections per square mile and provide traffic calming measures along the Project frontage on Qume Drive and Commerce Drive. This would effectively improve pedestrian access with additional space for a wide sidewalk and landscaping features while the narrower street width would help control vehicle speeds. As demonstrated in the Transportation Analysis (Appendix I), the above Mitigation Measure TRANS-1 would reduce the Project's per employee VMT to 13.65 and would be less than significant.

TRANS-3	<i>Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i>
	No Impact

A review of the Project was prepared (see Appendix I) to determine if adequate site access and on site circulation is provided and to identify any access issues that should be improved. The review, summarized below, was based on the current site plans, and in accordance with generally accepted traffic engineering standards and City of San José requirements.

SITE ACCESS

The Project would provide on-site parking spaces for delivery trucks and automobiles. The at-grade parking lots would be accessed by the following driveways for each building:

- Building 1 (358,180 square-foot warehouse)
 - Driveway 1 at Qume Drive – Full access for passenger vehicles
 - Driveway 2 at Qume Drive – Full access for passenger and delivery truck vehicles
- Building 2 (202,735 square-foot warehouse)
 - Driveway 3 at Qume Drive – Full access for passenger vehicles
 - Driveway 4 at Qume Drive – Full access for passenger and delivery truck vehicles
- Building 3 (83,751 square-foot warehouse)
 - Driveway 5 at Qume Drive – Full access for passenger vehicles
 - Driveway 6 at Qume Drive – Full access for passenger and delivery truck vehicles
 - Driveway 10 at McKay Drive – Full access for passenger and delivery truck vehicles (gated)
- Building 4 (69,825 square-foot warehouse)
 - Driveway 7 at Commerce Drive – Full access for passenger vehicles
 - Driveway 8 at Commerce Drive – Full access for passenger and delivery truck vehicles
 - Driveway 9 at McKay Drive – Full access for passenger vehicles
 - Driveway 11 at McKay Drive - Full access for passenger and delivery truck vehicles (gated)

Per City guidance, driveways should be a minimum of 150 feet from any intersection, and the Project satisfies this standard. The proposed driveway location optimizes sight distance and spacing for the proposed site plan.

Per City Municipal Code 20.90.100 and Table 20-220, the minimum width of the proposed two-way drive aisle is 26-feet. The driveways designed for truck access along Qume Drive, Commerce Drive, and McKay Drive are 34-feet wide at the curb line while the parking lot drive aisles are dimensioned 30 to 40-feet wide. Based on associated turning templates for the given design vehicle, the wider driveway dimensions proposed on the latest site plan are recommended to provide sufficient vehicle access and circulation for entering and exiting vehicles.

In addition, the standard parking spaces on site are dimensioned 9-feet by 18-feet while the truck parking spaces are dimensioned 12-feet by 55-feet which satisfy City parking standards. Vehicles accessing the Project driveways would be allowed to make turns in and out the site when there are sufficient vehicle gaps along Qume Drive and Commerce Drive. Inbound vehicle queues and delays are not expected to be significant issues. For outbound vehicles, on site vehicle queues are expected during the AM and PM peak due to a combination of inherent unpredictability of vehicle arrivals at driveways, and the random occurrence of gaps in traffic; however, these conditions are typical of driveways in industrial areas and do not represent a hazard due to geometric design.

VEHICULAR ON SITE CIRCULATION

The proposed Project would provide up to 412 standard vehicular parking spaces and up to 99 truck trailer parking spaces. Analysis using the American Association of State Highway and Transportation Officials (AASHTO) template revealed that passenger vehicles could adequately access the driveways on Qume Drive and Commerce Drive, maneuver through the parking lot, and park in the stalls without conflicting into other vehicles or stationary objects. The proposed layout provides sufficient vehicle clearance.

Per City Municipal Code 20.90.410, a building intended for use by a manufacturing plant, storage facility, warehouse facility, goods display facility, retail store, wholesale store, market, hotel, hospital, mortuary, laundry, dry cleaning establishment, or other use having a floor area of 10,000 square-feet or more shall provide a minimum of one (1) off-street loading space, plus one additional such loading space for each 20,000 square-feet of floor area. The Project provides at least 99 trailer parking spaces, and 80 truck loading docks on site and satisfies the City requirement.

The Surface Transportation Assistance Act (STAA) truck based on AASHTO and the Caltrans Highway Design Manual was assumed as the maximum size delivery truck that would be allowed due to truck route and maneuverability constraints in the Project area and at the Project driveway. Fire apparatus and garbage trucks were also checked for site access, and these vehicle dimensions were based on NCHRP 659 – Guide for the Geometric Design of Driveways.

STAA delivery trucks would be able to maneuver on Qume Drive and Commerce Drive adjacent to the Project site and access the designated truck driveways to load/unload and exit the site. A delivery truck would be able to enter either designated truck driveway to load/unload and exit the site without conflict. Garbage and recycling bins are anticipated to be located near the loading docks or in a designated trash enclosure within the parking lot. Waste collection vehicles would be able to enter the Project driveway to pick up bins and exit the site without conflict.

Therefore, the proposed Project would not substantially increase hazards due to a geometric design feature and there would be no impact.

TRANS-4 *Would the Project result in inadequate emergency access?*
No Impact

In the event of an emergency, it is assumed that fire apparatus vehicles will stage in the Project parking lots, along Qume Drive, or along Commerce Drive. Existing fire hydrants along the Project frontage provides direct fire access for emergency personnel. The Project driveways are 26-feet wide minimum, provide at least 10-foot high clearance, and satisfy the 20-foot horizontal and 10-foot- vertical minimum access clearances from the 2016 CA Fire Code. For these reasons, there would be no impact.

OPERATIONAL TRANSPORTATION ISSUES NOT REQUIRED UNDER CEQA

The following information is not required under CEQA but is provided here for informational purposes to help the decision makers in their consideration of the proposed Project.

TRIP GENERATION

Trip generation for the proposed Project land uses was calculated using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. Per the 2020 *Transportation Analysis Handbook*, trip generation reduction credits were applied to the Project including location-based mode-share and potential VMT credits.

Development of the proposed Project with all applicable trip reductions and credits is anticipated to generate a net total of 0 additional daily trips, 0 AM, and 0 PM peak hour trips to the roadway network.

Table 3.7-2: Project Trip Generation provides a summary of the proposed trip generation and trip reductions/credits.

Table 3.7-2: Project Trip Generation

Land Use / Description	Project Size	Total Daily Trips	AM Peak Trips			PM Peak Trips		
			TOTAL	IN	OUT	TOTAL	IN	OUT
Trip Generation Rates (ITE)								
Industrial Park [ITE 130]	Per 1,000 Sq Ft	3.37	0.34	81%	19%	0.34	22%	78%
Research & Development Center [ITE Per Employee(s) 760]		3.37	0.40	85%	28%	0.38	12%	88%
1. Baseline Vehicle-Trips								
Qume & Commerce Scheme 2	714.491 1,000 Sq Ft	2,408	243	197	46	243	53	190
Baseline Project Vehicle-Trips		2,408	243	197	46	243	53	190
2. Location-based Mode Share Adjustments								
Suburb With Multi-Family (Mode Share)	-8.0%	(193)	(20)	(16)	(4)	(20)	(5)	(15)
Project Vehicle-Trips After Reduction		2,215	223	181	42	223	48	175
3. Project Trip Adjustments								
VMT Vehicle-Trip Reduction (Model Sketch Tool)	8/1%	(180)	(19)	(15)	(4)	(19)	(4)	(15)
Project Vehicle-Trips After Reduction		2,035	204	166	38	204	44	160
4. Other Trip Adjustments								

Pass-by and Diverted Link Trips (N/A) 0%	0	0	0	/ 0	0	0	/ 0
Existing Uses (R&D Center – Becton Dickinson) -1150 Employee(s)	(3,876)	(460)	(391)	/ (69)	(437)	(52)	/ (385)
Existing Uses (Location-based Mode Share Adjustments) 8.0%	311	37	32	/ 6	35	5	/ 31
Other Trip Adjustment Subtotal	(3,565)	(423)	(359)	/ (63)	(402)	(47)	/ (354)
Baseline Project Vehicle-Trips	2,408	243	197	/ 46	243	53	/ 190
Gross Project Vehicle-Trips	2,035	204	166	/ 38	204	44	/ 160
Net Project Vehicle-Trips	(1,530)	(219)	(193)	/ (25)	(198)	(3)	/ (194)
Final Net Project Vehicle-Trips (For LOS Analysis)	0	0	0	/ 0	0	0	/ 0
Notes:							
Industrial Park Land Uses assumed based on latest proposed site plan from Herdman Architecture & Design							
Daily, AM, and PM trips based on average land use rates from the Institute of Traffic Engineers Trip Generation 11th Edition (September 2021)							
An 8% Mode Share Reduction from San José Transportation Analysis Handbook 2020 was applied since the Project is located in an "Suburb with Multi-Family Housing" area.							
An 8.1% VMT Reduction from San José Transportation Analysis Handbook 2020 was applied since the Project is implementing VMT reduction strategies to reduce the Project's per employee industrial VMT from 14.81 to 13.65.							
Existing on site use and employee data obtained from Project applicant and existing tenant (Becton Dickinson). ITE rates per employee conservatively applied to Project site for analysis purposes. Only location-based mode share adjustments were credited to the existing site. No VMT vehicle trip reductions were taken for the existing land use. The applicant confirmed that there were no TDM measures implemented at the existing site.							

Due to the nature of the proposed development, vehicle Project trips are anticipated to access the I-680 and I-880 regional freeways. Trip distribution and assignment assumptions for the Project were based on the Project driveway location, the freeway ramp location, community characteristics, and professional engineering judgment. Project trips to and from the site are anticipated to access the following regional facilities and destinations:

- Montague Expressway East
- Montague Expressway West
- Trade Zone Boulevard East
- Lundy Avenue South
- Murphy Avenue West
- I-880 North
- I-880 South
- I-680 North
- I-680 South

The Project trip assignment and distribution for the proposed Project is presented in Appendix I.

The Project is not anticipated to create an adverse effect to the intersection delay because the net trip generation is zero. Therefore, no LOS has been provided for the Background Plus Project Conditions.

SECTION 4.0 CUMULATIVE IMPACTS

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts “when the project’s incremental effect is cumulatively considerable.” The discussion does not need to be in as great of detail as is necessary for project impacts but is to be “guided by the standards of practicality and reasonableness.” The purpose of the cumulative analysis is to allow decision-makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed Project addressed in this Draft EIR.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document. The analysis must then determine whether the Project’s contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3).

THRESHOLDS OF SIGNIFICANCE

The cumulative discussion for each environmental issue addresses two aspects of cumulative impacts:

- 1) Would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question?
- 2) And, if that cumulative impact is likely to be significant, would the contributions to that impact from the proposed project make a cumulatively considerable contribution to those cumulative impacts?

CUMULATIVE SETTING

This section discusses whether the proposed Project would result in significant short-term or long-term environmental impacts when combined with other past, present, planned, and probable future projects in the area. Short-term impacts are generally associated with construction of the Project, while long-term impacts are those that result from permanent project features or operation of the Project.

Section 15130(b)(3) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. It is assumed that potential cumulative impacts would not occur in conjunction with other projects beyond this distance because of the nature of the Project. Neither construction nor operation will result in impacts significant enough to be cumulatively considerable beyond a 1.0-mile radius of the Project site. This is true of the cumulative analysis for the Project for all resource areas except for Air Quality, Greenhouse Gas, and Transportation where the Project’s contribution to a cumulative impact within the City of San José, the greater air basin, and globally is discussed. For Transportation analysis the cumulative project list includes 12 projects that have traffic generated that could have a cumulative impact with the proposed Project.

Two projects were identified for analysis as part of this cumulative analysis. These projects are summarized in **Table 4.0-1: Cumulative Projects within 1.0-mile**.

Table 4.0-1: Cumulative Projects within 1.0-mile of Project Site

Project	Location	Description	Impacts	Status
STACK Infrastructure Expansion (SP19-018)	2001 Fortune Drive, north said of Fortune Drive, approximately 500 feet westerly of Lundy Avenue. (0.5 mile from Project site)	The proposed Project would result in demolition of one existing industrial building and development of a new data center building. The second existing building, the old data center, would remain on site. The proposed Project would include 112,600 square feet of data center use, 20,941 square feet of office use, 7,448 square feet of miscellaneous office and storage use, 46,000 square feet of mechanical and circulation use, and 51,278 square feet of electrical rooms and storage use.	Less than significant impacts with mitigation incorporated for air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation/traffic.	IS/MND circulated 2/14/20 to 3/11/20; Response to comments completed April 2020; Approved in 2020.
Oakland Road Industrial Project (H20-018)	West side of Oakland Road, approximately 900 feet north of East Brokaw Road in North San José. (0.8 mile from Project site)	As proposed, the Project would develop a vacant site with two three-story buildings (Buildings A and B). Building A would include 21,900 square feet of industrial uses, 2,200 square feet of warehouse uses, and 1,195 feet of amenity space. Building B would include 15,000 square feet of industrial office uses. 128 parking spaces would be provided. The Project also includes removal of 28 existing trees.	Less than significant impacts with mitigation incorporated for biological resources, cultural resources, hazards and hazardous materials, noise, and transportation/traffic.	IS/MND circulated 6/22/21 to 7/12/21; Response to comments completed October 2021; Public hearing forum with Director of Planning, Building, and Code Enforcement pending.

Based on the analysis in the Initial Study (Appendix B), the Project would result in a less than significant impacts to aesthetics, agricultural/forestry resources, energy, geology and soils, hydrology and water quality, land use, mineral resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire. The degree to which the Project would add to existing or probable future impacts related to these topics would be negligible and would therefore not considerably contribute to any cumulative impacts associated with these topic areas. The Project's potential to contribute to any cumulatively significant air quality, biological resources, cultural resources,

greenhouse gas emissions, hazards and hazardous materials, noise, and transportation impacts are discussed below.

AIR QUALITY

The Basin is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards and nonattainment for O₃ and PM_{2.5} for Federal standards. As discussed above, the Project's construction-related emissions would not exceed the BAAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether an individual Project's emissions have the potential to affect cumulative regional air quality, it can be expected that the Project-related construction emissions would not be cumulatively considerable. The BAAQMD recommends Basic Construction Control Measures for all projects whether or not construction-related emissions exceed the thresholds of significance. Compliance with BAAQMD construction-related mitigation requirements are considered to reduce cumulative impacts at a Basin-wide level. As a result, construction emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

The BAAQMD CEQA Air Quality Guidelines do not include separate significance thresholds for cumulative operational emissions. However, with respect to regional air pollution, the development of the Project would result in population growth that is consistent with ABAG projections and the City General Plan. Therefore, the Project would be consistent with the 2017 Clean Air Plan that uses ABAG population forecasts.

As described in threshold AQ-1 above, the Project would also be consistent with the appropriate 2017 Clean Air Plan control measures, which are provided to reduce air quality emissions for the entire Bay Area region. Additionally, the discussion in threshold AQ-2 addresses cumulative impacts and demonstrates that the Project would not exceed the applicable BAAQMD thresholds for construction or operations. The BAAQMD CEQA Air Quality Guidelines note that the nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Consistency with the 2017 Clean Air Plan control measures would ensure that the Project would not cumulatively contribute to air quality impacts in the Basin. In threshold AQ-3 the discussion around existing permitted stationary and mobile sources from BAAQMD's Stationary Source Screening Analysis Tools found the proposed Project plus two existing stationary sources (BD Biosciences and HGST, Inc), major street, highway, and railway sources near the Project site would result in a cumulative 0.3 µg/m³ PM_{2.5} and a cancer risk of approximately 17 per million. This is below BAAQMD's cumulative threshold of 0.8 µg/m³ PM_{2.5} and 100 per million for cancer risk. Therefore, the Project's cumulative air quality effects would not be cumulatively considerable.

BIOLOGICAL IMPACTS

Impacts associated with biological resources have the potential to impact the Project area, as localized development could affect the same biological resources. The Project site does not include sensitive habitats and no sensitive special status species are likely to occur on site. However, Project construction could impact nesting birds, if present. The cumulative projects identified above were also determined to have the potential to impact nesting birds. However, each development project would comply with existing federal, state, and local regulations to avoid and/or minimize impacts to nesting birds. The Project

would implement Mitigation Measure BIO-1 which requires pre-construction nesting bird surveys to avoid potential impacts. Accordingly, the Projects contribution to cumulative impacts concerning nesting birds would not be cumulatively considerable.

Regarding the effects of tree removal, as stated above, the proposed Project would remove 620 existing trees. Tree removal would have localized impacts but would be less than significant by tree replanting or payment of in-leu fees pursuant to the City's Standard Permit Conditions for Tree Replacement. Therefore, the Project would not have a cumulatively considerable effect on biological resources.

CULTURAL RESOURCES

Impacts associated with cultural resources are often site-specific and localized. As with this Project, all cumulative development in the area would be subject to compliance with the existing local, state, and federal regulatory framework concerning the protection of historical and archaeological cultural resources. As such, cumulative impacts to cultural resources would be mitigated on a project-by-project basis, and in accordance with the established regulatory framework, through the established regulatory review process.

The proposed Project has no historical resources on site. The existing buildings on site are less than 45 years old and are not eligible historical resources on the local, State, or National level. Therefore, the Project has no cumulative impact on the built historic environment. The combined cumulative impacts to cultural resources associated with the Project's incremental effects and those of the cumulative projects would be less than significant with mitigation incorporated.

GREENHOUSE GAS EMISSIONS

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

It is generally the case that an individual project of the proposed Project's size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as inherently cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the proposed Project as well as other cumulative related projects, would be subject to all applicable regulatory requirements, which would further reduce GHG emissions. The proposed Project would be consistent with the General Plan, BAAQMD CEQA Guidelines, City of San José GHGRS, Plan Bay Area 2050, and CARB's Scoping Plan. As a result, the Project would not conflict with any GHG reduction plan. The Project's cumulative contribution of GHG emissions would be less than significant.

HAZARDS AND HAZARDOUS MATERIALS

Impacts associated with hazardous materials are often site-specific and localized. This Draft EIR evaluates potential environmental concerns in connection with the Project site and surrounding area. The database searches document the findings of various governmental database searches regarding properties with

known or suspected releases of hazardous materials or petroleum hydrocarbons within a search radius of up to one mile from the site and serves as the basis for defining the cumulative impacts study area.

Although some of the cumulative projects also have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are typically site-specific. Each cumulative project is required to address any issues related to hazardous materials or wastes.

Construction and operation of all Projects in the City must adhere to applicable regulations for the use, transport, and disposal of hazardous materials and implement mitigation in compliance with federal, State, and local regulations to protect against site contamination by hazardous materials. Compliance with all applicable federal, State, and local regulations related to hazardous materials would ensure that the routine transport, use, or disposal of hazardous materials would not result in adverse impacts. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers and the public to hazardous substances.

With adherence to applicable federal, State, and local regulations governing hazardous materials, the potential risks associated with hazardous wastes would be reduced to a level of less than significant. The incremental effects of the Project related to hazards and hazardous materials, are anticipated to be minimal, and any effects would be site-specific. Therefore, the Project would not result in incremental effects to a cumulative hazardous materials affect that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. Therefore, Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials.

NOISE AND VIBRATION

Construction Noise

The Project would contribute to other proximate construction noise impacts if construction activities were conducted concurrently. However, based on the noise analysis (Section 3.6 and Appendix K), the Project's construction-related noise impacts would be less than significant.

Construction activities at the two other planned and approved projects listed above would have completed construction before the proposed Project. Therefore, construction activities would not overlap. Additionally, the Project would include PDFs that would minimize construction noise effects. As such, the Project would not result in a cumulatively considerable construction noise impact.

Operational Noise

Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the Project and other foreseeable projects. Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the Project and other projects in the vicinity. However, noise from generators and other stationary sources could also contribute to cumulative noise levels.

Stationary Noise

Stationary noise impacts from the Project's operations would be less than significant. Conservatively, the analysis in Section 3.6 did not take credit for the existing noise sources generated on the Project site.

Additionally, due to site distance, intervening land uses, and the fact that noise dissipates as it travels away from its source, noise impacts from future on site activities and other stationary sources would be limited to the Project site and vicinity. Similar to the proposed Project, other planned and approved projects would be required to mitigate for stationary noise impacts at nearby sensitive receptors, if necessary. As stationary noise sources are generally localized, there is a limited potential for other projects to contribute to cumulative noise impacts. Therefore, other potential projects in the vicinity would not compound or increase the operational noise levels generated by the Project. Thus, the Project would not make a cumulatively considerable contribution to significant cumulative operational noises and cumulative operational noise impacts from related projects, in conjunction with project-specific noise impacts, would not be cumulatively significant.

Traffic Noise

A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. Cumulative increases in traffic noise levels were estimated by comparing the Existing Plus Project and Cumulative scenarios to existing conditions. The traffic analysis considers cumulative traffic from future growth assumed in the traffic model, as well as cumulative projects identified by the City of San José.

The following criteria is used to evaluate the combined effect of the cumulative noise increase.

- *Combined Effect.* The cumulative with Project noise level ("Background With Project") would cause a significant cumulative impact if a 3.0 dB increase over "Existing" conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use. Although there may be a significant noise increase due to the project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the project.

The following criteria have been used to evaluate the incremental effect of the cumulative noise increase.

- *Incremental Effects.* The "Background With Project" causes a 1.0 dBA increase in noise over the "Background Without Project" noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon and reduces as distance from the source increases. Consequently, only the Project and growth due to occur in the general area would contribute to cumulative noise impacts. **Table 4.0-2: Cumulative Plus Project Conditions Predicted Traffic Noise Levels**, identify the traffic noise effects along roadway segments in the vicinity of the Project site for "Baseline," "Background Without Project," and "Background With Project," conditions, including incremental and net cumulative impacts.

Table 4.0-2: Cumulative Plus Project Conditions Predicted Traffic Noise Levels.

Roadway Segment	Baseline ¹	Background Year Without Project ¹	Background Year With Project ¹	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
				dBA Difference: Baseline and Background Year With Project	dBA Difference: Background Year Without and With Project	
Qume Drive						
Commerce to Fortune	57.7	57.7	59.5	1.8	1.8	No
Commerce Drive						
Lundy to Qume	54.2	54.2	56.5	2.3	2.3	No
Concourse Drive						
Lundy to Qume	58.0	58.0	59.9	1.9	1.9	No
Fortune Drive						
Lundy to Qume	59.4	59.4	61.0	1.6	1.6	No
Lundy Avenue						
Trade Zone to Murphy	68.0	68.2	69.2	1.2	1.0	No
ADT = average daily trips; dBA = A-weighted decibels; DNL= day-night noise levels						
1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.						
Source: Based on data from the Transportation Analysis (Kimley-Horn, 2022). Refer to Appendix K for traffic noise modeling assumptions and results.						

First, it must be determined whether the “Background Year With Project” increase above existing conditions (Combined Effects) is exceeded. As indicated in **Table 4.0-2**, the Project area has no street segments that exceed the combined effects criterion. As shown in **Table 4.0-2**, under the combined effects criteria, the existing conditions would have the same dBA as compared to Background conditions without Project, except for Lundy Avenue where the existing conditions have lower dBA. Therefore, there would not be an overall increase in noise levels for all roadway segments in the future cumulative conditions. Under the Incremental Effects criteria, cumulative noise impacts are defined by determining if the forecast ambient (“Background Without Project”) noise level is increased by 1 dB or more. As indicated above, the Project does exceed the Incremental Effects criteria for the roadway segments analyzed. However, to have a significant cumulative effect the roadway must exceed the combined and incremental effects. Therefore, the Project would not have a cumulatively significant contribution to the noise environment.

TRANSPORTATION

The proposed Project would not significantly increase transportation demand or traffic conditions within the City, as it would result in 0 net additional daily trips, 0 AM and 0 PM peak hour trips to the roadway network with applicable trip reductions and credits applied. Accordingly, the Project would not generate an adverse effect to intersections within the Project area. While the Project could potentially exceed the City’s industrial VMT per employee threshold, the Project would implement Mitigation Measure TRANS-1, which would require the Project to implement bicycle and pedestrian improvements and shift curblines along Commerce Drive and Qume Drive to improve multi-modal access. Further, the proposed Project

would be consistent with the General Plan designation and associated goals and policies for the site, including those associated with transportation. With implementation of Mitigation Measure TRANS-1, the Project would not result in a cumulatively considerable impacts to transportation.

SECTION 5.0 GROWTH-INDUCING IMPACTS

For the purposes of this Project, a growth-inducing impact is considered significant if the Project would:

- a. Cumulatively exceed official regional or local population projections;
- b. Directly induce substantial growth or concentration of population. The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans; or
- c. Indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility (road or sewer line) necessitated by new development, either of which could result in the potential for new development not accounted for in local general plans.

Would the Project cumulatively exceed official regional or local population projections?

The Project is proposed on a site developed with an existing industrial/business park complex. As proposed, the Project would demolish all existing buildings on-site and develop the site with industrial warehouse distribution buildings. The Project would be compatible with the surrounding land uses which include commercial, office, and industrial uses, thus not pressuring adjacent properties to redevelop with new or different land uses. Because the Project does not include residential uses, there would be no direct increase in the City's population. The Project would include a total of approximately 715 employees on-site. The existing on-site employee population is approximately 1,150 people. Accordingly, Project implementation would not induce indirect population growth within the City, as employees during both construction and operational phases of the Project are expected to come from the surrounding area.

Since the Project is consistent with the planned growth identified in the Envision San José 2040 General Plan Supplemental Program EIR, the Project would not have a significant growth inducing impact.

Would the Project directly induce substantial growth or concentration of population? The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans?

The Project does not propose any residential uses, not does it propose development in a previously undeveloped area. As such, it would not directly induce substantial population growth or accelerate development in an undeveloped area.

Would the Project indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility (road or sewer line) necessitated by new development, either of which could result in the potential for new development not accounted for in local general plans?

As noted above, the Project is consistent with the planned growth identified in the Envision San José 2040 General Plan Supplemental Program EIR and would not result in substantial population growth or accelerated development. Further, the Project would occur on an infill site in an urbanized area of the City with connections to roads, transit, utilities and public services. The Project would not require the expansion of utilities because these services are provided to the site given its infill nature. As noted above, the Project would not require the expansion of roads because of its proximity to transit and the Project does not propose the expansion of transit services. Additional public services would not be required because the Project site is currently served by existing utilities and the Project would connect these services. The Project site is currently served by public safety providers, and the Project would continue to be served by the providers. While the proposed Project could potentially increase population indirectly by adding jobs, the proposed Project would promote the City General Plan's goals for planned growth because it supports the intensification of development in an urbanized area that is currently served by existing roads, transit, utilities, and public service. As such, the Project does not include expansion of infrastructure that would facilitate growth in the Project area or other areas of the City.

SECTION 6.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA and the CEQA Guidelines require that an EIR address “significant irreversible environmental changes which would be involved in the proposed Project, should it be implemented.” [Section 15126(c)]

Development of this site would involve the use of non- renewable resources during the construction phase. Construction would include the use of building materials, including materials such as petroleum-based products and metals that cannot reasonably be re-created. Construction also involves significant consumption of energy, usually petroleum-based fuels that deplete supplies of non- renewable resources. Once the new development is complete, occupants would use some non- renewable fuels to heat and light the buildings. However, the Project would utilize SJCE TotalGreen which includes 100 percent renewable energy for future operations/use of the site. The proposed Project would not result in substantial increase in water demand, as proposed warehouse buildings would meet LEED Silver standards through use of water-efficient landscaping, efficient water fixtures within buildings, and water conservation measures.

The City of San José encourages the use of building materials that include recycled materials and requires new development to meet minimum green building design standards. The proposed Project would be built to current codes, which require insulation and design to minimize wasteful energy consumption. In addition, the site is an infill location currently served by public transportation networks and within walking distance of jobs and services. The proposed Project would, therefore, facilitate more efficient use of resources over the lifetime of the Project.

SECTION 7.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the Project is implemented as it is proposed. No significant and unavoidable impacts have been identified as a result of the Project.

SECTION 8.0 ALTERNATIVES

Section 15126.6 of the State CEQA Guidelines require that an EIR describe a reasonable range of alternatives to the proposed Project that could feasibly attain most of the Project objectives, while avoiding or considerably reducing any of the significant impacts of the proposed Project. In addition, the No Project Alternative must be analyzed in the document.

In order to comply with the purposes of CEQA, it is necessary to identify alternatives that reduce the significant impacts that are anticipated to occur if the Project is implemented, while trying to meet most of the basic objectives of the Project. The Guidelines emphasize a common-sense approach.

The alternatives shall be reasonable, shall “foster informed decision making and public participation,” and shall focus on alternatives that avoid or substantially lessen the significant impacts.

The objectives of the Project are to:

1. Positively contribute to the economy of the region through new capital investment, creation of new employment opportunities, and revitalization of an existing developed site.
2. Improve economic vitality of the Project site by creating a modern distribution warehouse capable of attracting Class A tenants.
3. Maximize development of Class A speculative industrial warehouse buildings in the City of San José that are designed to meet contemporary industry standards for operational design criteria, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
4. Seek opportunities through site design, engineering, “green” building strategies, Low Impact Development (LID), and on-going management practices to minimize environmental impacts on the local and regional environment.
5. Develop buildings that meet new state and City sustainability and green building standards and reduce use of non-renewable energy for building operations.
6. Maximize industrial warehouse buildings in close proximity to an already-established industrial area, designated truck routes, and the State highway system in order to avoid or shorten truck-trip lengths and commutes on other roadways.
7. Encourage development of industrial areas and redevelopment of existing older or marginal industrial areas (e.g., areas which could support intensified operational activity), particularly in locations that facilitate efficient commute patterns.
8. Develop buildings with an overall design that will provide a distinctive image for corporate users, and generous setbacks with thoughtfully designed landscaping.
9. Provide safe, efficient, and accessible multi-modal transportation opportunities within the Project area to support businesses and increase pedestrian activity.

The Project would result in less than significant impacts to construction-period health risk effects from PM emissions; tree removal associated with site redevelopment; construction-period disturbance of

nesting birds; construction-period inadvertent discovery of previously unidentified cultural resources; construction-period disturbance, handling, and disposal of potentially hazardous soils; construction-period noise effects; and operational VMT increases with implementation of mitigations outlined in this Draft EIR.

As stated in the State CEQA Guidelines: "An EIR shall describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives." (CEQA Guidelines, Section 15126.6, subd. (a)) As this implies, "an agency may evaluate on-site alternatives, off-site alternatives, or both." (*Mira Mar, supra*, 119 Cal.App.4th at p. 491.) The Guidelines thus do not require analysis of off-site alternatives in every case. Nor does any statutory provision in CEQA "expressly require a discussion of alternative Project locations." (119 Cal.App.4th at p. 491 citing §§ 21001, subd. (g), 21002.1, subd. (a), 21061. The proposed Project would not result in any significant impacts, and all Project effects would be mitigated to a less than significant level. Notwithstanding, the following analysis evaluates a range of alternatives to the proposed Project that may further reduce or avoid the already less than significant impacts.

ALTERNATIVES CONSIDERED AND REJECTED FROM FURTHER CONSIDERATION

As discussed previously in this Draft EIR, the Project would result in less than significant impacts to construction-period health risk effects from PM emissions; tree removal associated with site redevelopment; construction-period disturbance of nesting birds; construction-period inadvertent discovery of previously unidentified cultural resources; construction-period disturbance, handling, and disposal of potentially hazardous soils; construction-period noise effects; and operational VMT increases with implementation of mitigation. Alternatives were considered with the objective of trying to avoid or further reduce the already less than significant impacts to these resource areas. The alternatives that were considered and the reasons they were rejected from further detailed analysis are discussed below.

ALTERNATE SITE ALTERNATIVE

In considering an alternative location in an EIR, the CEQA Guidelines advise that the key question is "whether any of the significant effects of the Project would be avoided or substantially lessened by putting the Project in another location." The proposed Project is an industrial warehouse/distribution development within an area of the City primarily developed with similar commercial and industrial land use types.

The Project's less than significant effects to Biological Resources are related to tree removal at the Project site. An alternative location may locate the Project on a site with fewer existing trees, necessitating less tree removal than Project implementation. However, as discussed in Section 3.2: Biological Resources, the existing tree canopy within the Project site is low-quality and overall landscape value would increase upon Project implementation. The remaining impacts identified are not unique to the Project site, but rather to the nature of development. Accordingly, an alternative site would not substantially lessen a significant effect of the Project because the Project would not have a significant impact and because this alternative would also likely result in some amount of tree removals, thereby not avoiding the potential effects associated with tree removals.

This alternative would entail similar construction-period effects as the Project, given that the Air Quality and Noise effects are not site-specific. For example, development of the Project on any suitable alternative site in or around the City may not avoid or substantially lessen the Project's construction related air quality emissions because emission related impacts would occur no matter where the development is located. Similarly, an alternate site alternative would still require similar construction equipment and may occur in an area with higher potential to disturb the noise environment of sensitive receptors. This alternative would also not substantially lessen the Project's transportation effects related to operational VMT. An alternative site could locate the subject Project outside of an industrial or commercial area and potentially further from major transportation routes in the City, which could result in higher VMT effects than the Project. Regardless, this alternative would not substantially lessen operational VMT because the same number of employees would be traveling to the alternate site and the Project already has a less than significant effect related to VMT.

Furthermore, viable alternative locations for the Project are limited to those that would feasibly attain most of the Project objectives. While it is feasible that an alternative site could be selected for the Project, the Project applicant does not control other sites in the City. The Project site is within an established industrial area with identified truck routes that would support Project operations. The Project site has been previously developed and Project implementation would support intensified operational activity and enhanced sustainability features on site. Finally, the Project site is large enough to support the proposed development intensity. For these reasons, an alternative location was not analyzed.

RESIDENTIAL ALTERNATIVE

This Residential Alternative would redevelop the Project site with multi-family residential uses and associated parking and circulation, landscaping, and infrastructure improvements. This Alternative would require a General Plan Amendment and re-zone to change the Project site's land use designation and zoning district to allow for residential uses. This alternative considers that the Project site would amend the General Plan land use designation from Industrial Park to Urban Residential and change the zoning district from Industrial Park to Urban Residential (UR). The UR zoning district allows for construction, use, and occupancy of residential development at 30-95 dwelling units per acre with a maximum building height of 135 feet. The Residential Alternative was explored to consider how the site could be used to increase the availability of housing within the City.

This alternative would entail similar construction-period effects as the Project, as development of residential uses would require similar demolition, ground disturbance, and construction activities. Development of residential uses would not avoid or substantially lessen the Project's construction related PM emissions because emission related impacts would occur so long as construction occurs on the Project site. The Residential Alternative would also require use of construction equipment with the potential to disturb the noise environment of nearby sensitive receptors, and would not avoid the Project's less than significant effects associated with construction-related noise. This alternative would also not lessen the Project's less than significant effects related to construction-period inadvertent discovery of previously unidentified cultural resources or construction-period disturbance, handling, and disposal of potentially hazardous soils, as implementation of this alternative would require similar excavation and site improvement activities to facilitate development of residential uses.

Additionally, the Project's less than significant effects to Biological Resources are related to tree removal at the Project site and construction-period disturbance of nesting birds. This alternative would not substantially lessen a significant effect of the Project because the Project would not have a significant impact and because this alternative would likely result in tree removals for site development activities. Similarly, construction activities associated with the Residential Alternative would not further lessen the Project's already less than significant effects concerning construction-period disturbance of nesting birds, as development activities would still occur on the Project site.

The Residential Alternative would have higher daily, AM peak hour, and PM peak hour trips than the proposed Project.²¹ Accordingly, this alternative would result in proportionally greater traffic effects than Project, which would generate a net total of 0 additional daily trips, 0 AM, and 0 PM peak hour trips.

This alternative would fulfill Project objectives 4, 5, and 9. However, the Residential Alternative would not be consistent with the existing General Plan land use designation or zoning district of the Project site and would require a General Plan Amendment and Rezoning. Despite a possible approval of a General Plan Amendment and Rezoning, development of the Residential Alternative on the Project site would be incompatible with the nature of surrounding industrial and commercial developments. For these reasons, this alternative was rejected based on feasibility and inconsistency with key Project objectives.

MIXED-USE ALTERNATIVE

The Mixed-Use Alternative would redevelop the Project site with multi-family residential and commercial uses, in addition to associated parking and circulation, landscaping, and infrastructure improvements. This Alternative would require a General Plan Amendment and re-zone to change the Project site's land use designation and zoning district to allow for residential and mixed uses. This alternative considers that the Project site would amend the General Plan land use designation from Industrial Park to Transit Residential and change the zoning district from Industrial Park (IP) to Transit Residential (TR). The TR District allows for the development of high density mixed use development within close proximity to transit at 50-250 dwelling units per acre with a maximum FAR of 12 for commercial uses. The TR District allows for a maximum building height of 270 feet. The Mixed-Use Alternative was explored to consider how the site could be used to increase the availability of housing within the City while also maintaining job opportunities on-site.

This alternative would entail similar construction-period effects as the Project, as development of a mixed-use project would require similar demolition, ground disturbance, and construction activities. Development of this alternative may not avoid or substantially lessen the Project's construction related air quality emissions because emission related impacts would occur so long as construction occurs on the Project site. The Mixed-Use Alternative would also require use of construction equipment with the potential to disturb the noise environment of nearby sensitive receptors, and would not avoid potential effects associated with construction-related noise. This alternative would also not lessen the Project's effects related to construction-period inadvertent discovery of previously unidentified cultural resources or construction-period disturbance, handling, and disposal of potentially hazardous soils, as

²¹ Based on *ITE Trip Generation Manual, 11th Edition* Industrial Park [ITE 130] daily trip generation rate of 3.37 trips, AM rate of 0.34 trips, and PM rate of 0.34 trips; and *Multifamily Housing (mid-rise)* [ITE 220] daily trip generation

implementation of this alternative would require similar excavation and site improvement activities to facilitate redevelopment of the Project site.

Additionally, the Project’s less than significant effects to Biological Resources are related to tree removal at the Project site and construction-period disturbance of nesting birds. This alternative would not substantially lessen a significant effect of the Project because the Project would not have a significant impact and because this alternative would likely result in tree removals for site development activities. Similarly, construction activities associated with the Mixed-Use Alternative would not further lessen the Project’s already less than significant effects concerning construction-period disturbance of nesting birds, as development activities would still occur on the Project site.

The Mixed-Use Alternative would have higher daily and PM trip generation than the proposed Project.²² Accordingly, this alternative would result in proportionally greater traffic effects than Project, which would generate a net total of 0 additional daily trips, 0 AM, and 0 PM peak hour trips.

This alternative would fulfill Project objectives 1, 4, 5, and 9. However, the Mixed Use Alternative would not be consistent with the existing General Plan land use or zoning designation of the Project site and would require a General Plan amendment and zone change. After approval of a General Plan amendment and zone change, development of the Mixed Use Alternative would introduce residential uses on the Project site which would be incompatible with the nature of existing surrounding industrial and commercial developments. For these reasons, this alternative was rejected based on feasibility and inconsistency with key Project objectives.

PROJECT ALTERNATIVES ANALYSIS

An analysis of Project alternatives that might reduce or avoid the already less than significant impacts of the Project are evaluated below.

A. NO PROJECT ALTERNATIVE

The CEQA Guidelines [Section 15126(d)4] require that an EIR specifically discuss a “No Project” alternative, which shall address both “the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the Project is not approved, based on current plans and consistent with available infrastructure and community services.”

The No Project Alternative would retain the current General Plan land use designation and zoning district, maintain existing buildings, and continue the current operations on the Project site. No development of the proposed Project would occur. If the Project site were to remain as is, there would be no new impacts.

Conclusion: Implementation of the No Project Alternative would avoid the already less than significant impacts to Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Noise, and Transportation identified in this Draft EIR since no construction would be needed. However, the No Project Alternative would not meet any of the Project objectives listed above.

²² Based on ITE *Trip Generation Manual, 11th Edition* Industrial Park [ITE 130] daily trip generation rate of 3.37 trips, AM rate of 0.34 trips, and PM rate of 0.34 trips; and Mid-Rise Residential with 1st Floor Commercial [ITE 231] daily trip generation rate of 3.44 trips, AM rate of 0.30 trips, and PM rate of 0.36 trips.

B. RE-USE AND REDUCED DENSITY ALTERNATIVE

The Re-Use and Reduced Density Alternative considers adapting and reprogramming existing buildings on-site for a warehouse/distribution project. Under this alternative, the Project would maintain existing building footprint and overall site layout. The Re-Use and Reduced Density Alternative would represent a 32-percent decrease in building area as compared to the proposed Project. This Alternative would require substantial reconstruction and adaptation of existing buildings and site alterations to accommodate industrial warehouse/distribution uses. The Re-Use and Reduced Density Alternative would not include any off-site improvements.

2350 Qume Drive is currently developed with a two-story office building with clear heights of approximately 20 feet, due to obstruction by second floor offices. The Re-Use and Reduced Density Alternative would require demolition of the north side of the building and reconstruction of structural columns to increase clear heights to 30 feet and provide 4 dock doors. The northern portion of the building would be repurposed for warehouse uses, while the remaining building area would be used for office or for racking and forklift operation. Additional structural and seismic improvements and upgrades would occur throughout the building. Due to height limitations of the existing structure, no mezzanine floor would be provided. Overall site layout improvements would be implemented to improve traffic flow; however, access for trucks would remain limited due to insufficient turning radii and street widths.

2150 Qume Drive and 2222 Commerce Drive are each developed with a single story office building with clear heights and drop ceilings of 14 to 16 feet that would not function for warehouse uses. The Re-Use and Reduced Density Alternative would require substantial structural improvements to raise building roofs to provide 30-foot clear heights. Dock doors would be constructed on the south side of the building on 2150 Qume Drive and would require full demolition of this portion of the building. Dock doors would be constructed on the south side of 2222 Commerce Drive and would require substantial reconstruction and structural improvement. This alternative would maintain the existing building façade and glazing, and add metal panels to the building exterior for architectural enhancement. Further, on-site circulation would be improved on both parcels to provide truck circulation.

This alternative would potentially reduce already less than significant effects to construction-period health risk effects from PM emissions, as the Re-Use and Reduced Density Alternative would not include substantial excavation or grading activities, and would have less intense construction activities as compared to the proposed Project. This would result in proportionally fewer construction-related truck trips and associated diesel emissions with the potential to reduce health-risk impacts as compared to the Project. However, building rehabilitation and structural improvement would require extensive construction and the construction timeline would likely not be shorter than that of the proposed Project. Therefore, due to the amount of construction required for this alternative, it would not substantially lessen the already less than significant effect related to construction-period air quality emissions.

Similarly, the Re-Use and Reduced Density Alternative would potentially lessen effects to construction-period noise, as construction activities would require limited of construction equipment for ground disturbance activities, including earthmovers, material handlers, and portable generators. However, this alternative would still require reconstruction of existing buildings and the use of construction equipment

on-site. Therefore, this alternative would not avoid the Project's already less than significant impacts to construction-period noise, nor would it substantially lessen the effect.

The Re-Use and Reduced Density Alternative would also not avoid the Project's already less than significant impacts to tree removals associated with site redevelopment, but would have the potential to reduce impacts, as construction of this alternative would include limited improvements to on-site circulation and parking. Accordingly, the Re-Use and Reduced Density Alternative would have a lesser potential for removal of existing on-site trees and need for associated mitigation (e.g., replacement plantings and payment of in lieu fees).

The Re-Use and Reduced Density Alternative would generally maintain the existing site layout and building footprint, and would require substantially less excavation than the Project. However, given that ground disturbance of some degree would be required, this alternative would not avoid the Project's already less than significant impacts to inadvertent discovery of previously unidentified cultural resources on-site and disturbance, handling, and disposal of potentially hazardous soils.

Due to reduced building area, the Re-Use and Reduced Density Alternative would support fewer employees and would therefore result in fewer vehicle trips, thereby reducing the Project's already less than significant effects to operational VMT. However, this would not be a substantial reduction and no significant impacts would be avoided.

On the other hand, the Re-Use and Reduced Density Alternative would not implement proposed improvements required by the Project, including increased pedestrian and bicycle access within the Project area through narrowing of roadway widths along Qume Drive, and development of a multi-use path connecting McKay Drive and Qume Drive on the Project site. Further, this alternative would have greater demand on non-renewable energy resources, as the existing building would not meet the latest building standards or incorporate sustainable design features as compared to the proposed Project.

Conclusion: The Re-Use and Reduced Density Alternative would potentially reduce the Project's already less than significant effects to construction-period inadvertent discovery of previously unidentified cultural resources and construction-period disturbance, handling, and disposal of potentially hazardous soils. The Project's less than significant impacts to construction-period health risk effects from PM emissions, tree removal associated with site redevelopment, construction-period disturbance of nesting birds, construction-period noise effects, and operational VMT increases would also potentially be lessened due to less dense development activity on-site.

However, the Re-Use and Reduced Size Alternative would result in potentially greater impacts associated with energy use and operational greenhouse gas emissions associated with off-site generation of electrical power due to limited building-design, sustainability, and utility infrastructure improvements. This alternative would not provide benefits to the Project area provided by the proposed Project, including bicycle and pedestrian improvements to promote alternative transportation. Further, this alternative would not increase the overall landscape value on the Project site, as no landscape improvements would occur.

This alternative would not meet the Project objectives focused on maximizing development of Class A industrial warehouse buildings within the City because re-use and redevelopment of existing buildings

would result in the development of Class D warehouse buildings. Specifically, this alternative would not meet the following Project objectives:

- Objective 2: Improve economic vitality of the Project site by creating a modern distribution warehouse capable of attracting distribution warehousing tenants.
- Objective 3: Maximize development of Class A speculative industrial warehouse buildings in the City of San José that are designed to meet contemporary industry standards for operational design criteria, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
- Objective 4: Seek opportunities through site design, engineering, “green” building strategies, Low Impact Development (LID), and on-going management practices to minimize environmental impacts on the local and regional environment.
- Objective 5: Develop buildings that meet new state and City sustainability and green building standards and reduce use of non-renewable energy for building operations.
- Objective 8: Develop buildings with an overall design that will provide a distinctive image for corporate users, and generous setbacks with thoughtfully designed landscaping.
- Objective 9: Provide safe, efficient, and accessible multi-modal transportation opportunities within the Project area to support businesses and increase pedestrian activity.

The Re-Use and Reduced Density Alternative would not meet market demand for Class A industrial warehouse buildings within the City, as minimum requirements for building shell design, dock area design, and truck drive widths would not be met. Despite substantial reconstruction of existing buildings, the Re-Use and Reduced Density Alternative would result in a low ratio of dock doors to total building area, limited clear heights, limited improvement in building energy efficiency, and no change in architectural design. This alternative would result in development of a Class D warehouses and would not attract modern warehouse tenants as compared to the proposed Project. This may result in longer vacancy periods.

Further, development under the Re-Use and Reduced Density Alternative would not be representative of Class A industrial warehouse buildings which maximize useable floor area through small offices in the corner of buildings and development of two story buildings with mezzanines. Class A warehouses also provide high-level architectural design with high image façade features and glass visibility to reflect corporate character, which would not be achieved by this alternative. Finally, due to significant changes in building standards, new buildings offer a much higher level of energy efficiency and provide benefits including lower energy consumption through the use of high efficiency mechanical systems and compliance with more stringent insulation requirements and glazing values, better lighting levels for occupants through use of LED fixtures and controls, and more efficient water usage. For these reasons, this alternative was rejected based on feasibility and inconsistency with key Project objectives.

C. OTHER PERMITTED USE – MANUFACTURING ALTERNATIVE

The Manufacturing Alternative considers maintaining the same development footprint and site layout as the proposed Project, but programming proposed buildings for manufacturing uses. Manufacturing uses

are a permitted land use under the IP General Plan designation and IP Zoning District. This alternative would include landscape improvements, updates to on-site circulation and vehicle access, and upgraded utility connections, similar to the Project. The proposed buildings would be built to the latest state and City sustainability and green building standards to maximize energy efficiency and incorporate similar LID features to minimize environmental impacts on-site. Further, consistent with the proposed Project, the Manufacturing Alternative would be required to provide increased pedestrian and bicycle access within the Project area through narrowing of roadway widths along Qume Drive, and development of a multi-use path connecting McKay Drive and Qume Drive on the Project site.

The Manufacturing Alternative would not further reduce already less than significant impacts to construction-period health risk effects from PM emissions, tree removal associated with site redevelopment, construction period disturbance of nesting birds, construction period inadvertent discovery of archeological resources, construction period noise effects, construction period handling of hazardous materials in on-site soils, and operational VMT increases associated with the proposed Project.

Demolition and construction activities would result in health-risk impacts associated with PM emissions from construction equipment and heavy-duty truck diesel exhaust, similar to the proposed Project. Operational air quality impacts of the Manufacturing Alternative would be potentially greater than the Project, as manufacturing uses are typically associated with higher emissions from use of heavy duty equipment on-site.

Similar to the proposed Project, the Manufacturing Alternative would include improvements to on-site circulation and parking, which would require removal of existing on-site trees and implementation of associated mitigation (e.g. replacement plantings and payment of in lieu fees). Further, this alternative would have the potential to disturb potentially suitable native nesting and/or migratory bird species on-site during construction. Accordingly, the Manufacturing Alternative's potential effects to Biological Resources would be the same as the proposed Project.

The Manufacturing Alternative would require significant ground disturbance and grading, and have the potential for inadvertent discovery of previously unidentified cultural resources on-site. Potential impacts to cultural resources would be the same as the proposed Project.

Excavation and grading activities would result in disturbance of onsite soils, similar to the Project. The Manufacturing Alternative would require implementation of a soil management plan and associated construction protocols, similar to the proposed Project. Operational impacts would be potentially more significant, as manufacturing uses are typically associated with greater use of potentially hazardous materials (e.g. solvents, petroleum products) and a range of chemicals depending on end-users. Therefore, the Manufacturing Alternative would not avoid or lessen the Project's already less than significant impact to construction-period disturbance, handling, and disposal of potentially hazardous soils, but would have the potential for greater impacts associated with hazards and hazardous materials on-site due to the nature of manufacturing uses.

Construction-period noise impacts associated with construction equipment including earthmovers, material handlers, and portable generators would occur as part of the Manufacturing Alternative and would not lessen the already less than significant impacts of the proposed Project. Operational noise impacts associated with use of manufacturing equipment on-site would be potentially greater, as

manufacturing uses generally result in greater operational noise and vibration impacts associated with use of heavy machinery on-site. Therefore, the construction-period noise impacts of this alternative would be consistent with the proposed Project, operational noise impacts would be potentially greater than the proposed Project.

As seen in **Table 8.0-1: Manufacturing Alternative Trip Generation**, the Manufacturing Alternative would represent a 41 percent increase in overall daily trips due to a greater number of employees on-site. While the fleet mix would result in 21 percent fewer truck trips and associated emissions, there would be an increase in overall vehicle trips. Despite incorporation of proposed pedestrian and multi-modal transportation improvements to the Project site and Project area, the Manufacturing Alternative would generate more vehicle trips as compared to the proposed Project, and therefore would not minimize transportation related effects.

Table 8.0-1: Manufacturing Alternative Trip Generation

Land Use/Description ¹	Trip Generation Rates (ITE)	Total Daily Trips	Daily Truck Trip Rate	Truck % of Total	Daily Truck Trips
Industrial Park [ITE 130]	3.37	2,408 ⁴	0.57	16.91	407
Manufacturing [ITE 140]	4.75	3,394	0.45	9.47	321
Percent Change Daily Trips		+ 40.9%²	Percent Change Truck Trips		- 21.1%³
Notes					
¹ Based on Institute of Transportation Engineers (ITE) <i>Trip Generation Manual, 11th Edition</i> .					
² Percent Change in Daily Trips = $[(3,394-2,408)/2,408] * 100\% = 40.94\%$					
³ Percent Change in Truck Trips = $[(321-407)/407] * 100\% = -21.13\%$					
⁴ Total Daily Trips shown do not include traffic reduction and trip credits					

Conclusion: The Manufacturing Alternative would not avoid or substantially reduce the Project’s already less than significant impacts to construction-period health risk effects from PM emissions; tree removal associated with site redevelopment; construction-period disturbance of nesting birds; construction-period inadvertent discovery of previously unidentified cultural resources; construction-period disturbance, handling, and disposal of potentially hazardous soils; or construction-period noise effects. However, impacts associated with operational PM emissions, operational use of hazardous materials, operational noise effects, and operational VMT increases would be potentially greater due to the nature of manufacturing uses. Accordingly, the Manufacturing Alternative would not avoid or minimize already less than significant environmental impacts of the Project.

Further, this alternative would not meet the Project objectives focused on maximizing development of Class A industrial warehouses within the City because as the end-uses would not be warehousing. Specifically, this alternative would not meet the following Project objectives:

- Objective 2: Improve economic vitality of the Project site by creating a modern distribution warehouse capable of attracting distribution warehousing tenants.
- Objective 3: Maximize development of Class A speculative industrial warehouse buildings in the City of San José that are designed to meet contemporary industry standards for operational design criteria, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.

- Objective 6: Maximize industrial warehouse buildings in close proximity to an already-established industrial area, designated truck routes, and the State highway system in order to avoid or shorten truck-trip lengths and commutes on other roadways.

For these reasons, this alternative was rejected based on feasibility and inconsistency with key Project objectives.

D. Environmentally Superior Alternative

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR shall identify an environmentally superior alternative among the other alternatives.

The environmentally superior alternative is the Re-Use and Reduced Density Alternative because it would future reduce the Project's already less than significant effects to construction-period inadvertent discovery of previously unidentified cultural resources and construction-period disturbance, handling, and disposal of potentially hazardous soils and potentially reduce less than significant impacts to construction-period health risk effects from PM emissions, tree removal associated with site redevelopment, construction-period disturbance of nesting birds, construction-period noise effects, and operational VMT increases, as compared to development under the proposed Project or other alternatives. This alternative would require less intense construction activities and fewer site improvements, reducing construction-period effects related impacts to PM emissions and construction-period noise. Further, this alternative would require less grading and ground disturbance due to limited site and infrastructure improvements, resulting in reduced impacts to tree removal, inadvertent discovery of cultural resources, and disturbance, handling, and disposal of potentially hazardous soils. Due to reduced building area, operation of the Re-Use and Reduced Density Alternative would generate fewer vehicle trips, thereby potentially reducing already less than significant impacts to operational VMT.

- However, this alternative would not achieve most of the basic objectives of the proposed Project. This alternative would not meet the following Project objectives:
- Objective 2: Improve economic vitality of the Project site by creating a modern distribution warehouse capable of attracting distribution warehousing tenants.
- Objective 3: Maximize development of Class A speculative industrial warehouse buildings in the City of San José that are designed to meet contemporary industry standards for operational design criteria, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
- Objective 4: Seek opportunities through site design, engineering, "green" building strategies, Low Impact Development (LID), and on-going management practices to minimize environmental impacts on the local and regional environment.
- Objective 5: Develop buildings that meet new state and City sustainability and green building standards and reduce use of non-renewable energy for building operations.
- Objective 8: Develop buildings with an overall design that will provide a distinctive image for corporate users, and generous setbacks with thoughtfully designed landscaping.

- Objective 9: Provide safe, efficient, and accessible multi-modal transportation opportunities within the Project area to support businesses and increase pedestrian activity.

As discussed throughout this Draft EIR, the proposed Project would not result in significant impacts and the Re-Use and Reduced Density Alternative would therefore not avoid significant impacts of the Project. Further, this alternative would not meet Project objectives or provide added benefits to the Project area, specifically the off-site improvements to the local transportation network. Finally, the Re-Use and Reduced Density Alternative would be redeveloped Class D warehouses and would not meet the needs of modern Class A industrial warehouse users, nor achieve key Project objectives.

SECTION 9.0 REFERENCES

- Bay Area Air Quality Management District, 2005. *Regulation 8 Organic Compounds*. Available at <https://www.baaqmd.gov/~media/dotgov/files/rules/reg-8-rule-40-aeration-of-contaminated-soil-and-removal-of-underground-storage-tanks/documents/rg0840.pdf?la=en>. Accessed March 9, 2022.
- Bay Area Air Quality Management District, 2017. *Clean Air Plan*. Available at https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed March 9, 2022.
- California Air Resources Board, 2008. *Climate Change Scoping Plan*. Available at https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed March 9, 2022.
- California Air Resources Board, 2017. *California's 2017 Climate Change Scoping Plan*. Available at https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed March 9, 2022.
- California Air Resources Board Research Division and University of California, Berkeley, 1991. *Activity Patterns of California Residents*.
- California Department of Forestry and Fire Protection. *FHSZ Viewer*. Available at <https://egis.fire.ca.gov/FHSZ/>. Accessed February 8, 2022.
- California Department of Forestry and Fire Protection. VHFHSZ in LRA. Available at <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed February 8, 2022.
- California Department of Transportation, 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. Available at http://docs.ppsmixeduse.com/ppp/DEIR_References/2013_0901_caltrans_technicalnoisesupplement.pdf. Accessed March 9, 2022.
- California Department of Transportation, 2020. *Transportation and Construction Vibration Guidance Manual*. Available at <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>. Accessed March 9, 2022.
- City of San José, 2011. Draft Program Environmental Impact Report for the Envision San José 2040 General. Available at <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/completed-eirs/envision-san-jose-2040-general-plan-4-year/envision-san-jos-2040-general-plan>. Accessed March 9, 2022.
- City of San José, 2011. *Envision San José 2040 General Plan*. Available at <https://www.sanjoseca.gov/home/showpublisheddocument/22359/637686090967970000>. Accessed March 9, 2022.

- City of San José, 2011. *Envision San José 2040 General Plan Primary Truck Routes Diagram*. Available at <https://www.sanjoseca.gov/home/showpublisheddocument/22563/63668898048410000>. Accessed March 9, 2022.
- City of San José, 2019. *Norman Y. Mineta San José International Airport Master Plan Update, Noise Assessment for the Master Plan Environmental Impact Report*. Available at <https://www.sanjoseca.gov/home/showpublisheddocument/61662/637304476649030000>. Accessed March 9, 2022.
- City of San José, 2022. Code of Ordinances. Available at https://library.municode.com/ca/san_jose/codes/code_of_ordinances. Accessed February 8, 2022
- County of Santa Clara, 2019. *Santa Clara County Wildland Urban Interface Fire Area*. Available at https://www.sccgov.org/sites/dpd/DocsForms/Documents/WUIFA_Adopted_Map.pdf. Accessed February 8, 2022.
- Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, 2010, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*. Available at <https://multimedia.3m.com/mws/media/8885530/noise-navigator-sound-level-hearing-protection-database.pdf>. Accessed March 9, 2022.
- Federal Highway Administration, 2006. *Roadway Construction Noise Model*. Available at https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/. Accessed March 9, 2022.
- Federal Interagency Committee on Noise, 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. Available at https://fican1.files.wordpress.com/2015/10/reports_noise_analysis.pdf. Accessed March 9, 2022.
- Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed March 9, 2022.
- U.S. Fish and Wildlife Service, 2022. *National Wetlands Inventory, Wetlands Mapper*. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed March 10, 2022.

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