Initial Study

3607 Kifer Road Office Project

File No: PLN2015-11138/CEQ2015-01201

THE CITY OF SANTA CLARA CALIFORNIA
The Mission City
INCORPORATED 1852

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

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SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of Santa Clara. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from the construction of a five-story, 177,134 square foot office building and a five-level parking garage in the City of Santa Clara.

The City of Santa Clara is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project.

All documents referenced in this Initial Study are available for public review in the office of Planning and Inspection in Santa Clara City Hall, 1500 Warburton Avenue, during normal business hours.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

3607 Kifer Road Office Project

2.2 PROJECT LOCATION

The project site is located at the northwest corner of Kifer Road and Lawrence Expressway in the City of Santa Clara.

Figure 2.2-1 Regional Map
Figure 2.2-2 Vicinity Map
Figure 2.2-3 Aerial Map

2.3 LEAD AGENCY CONTACT

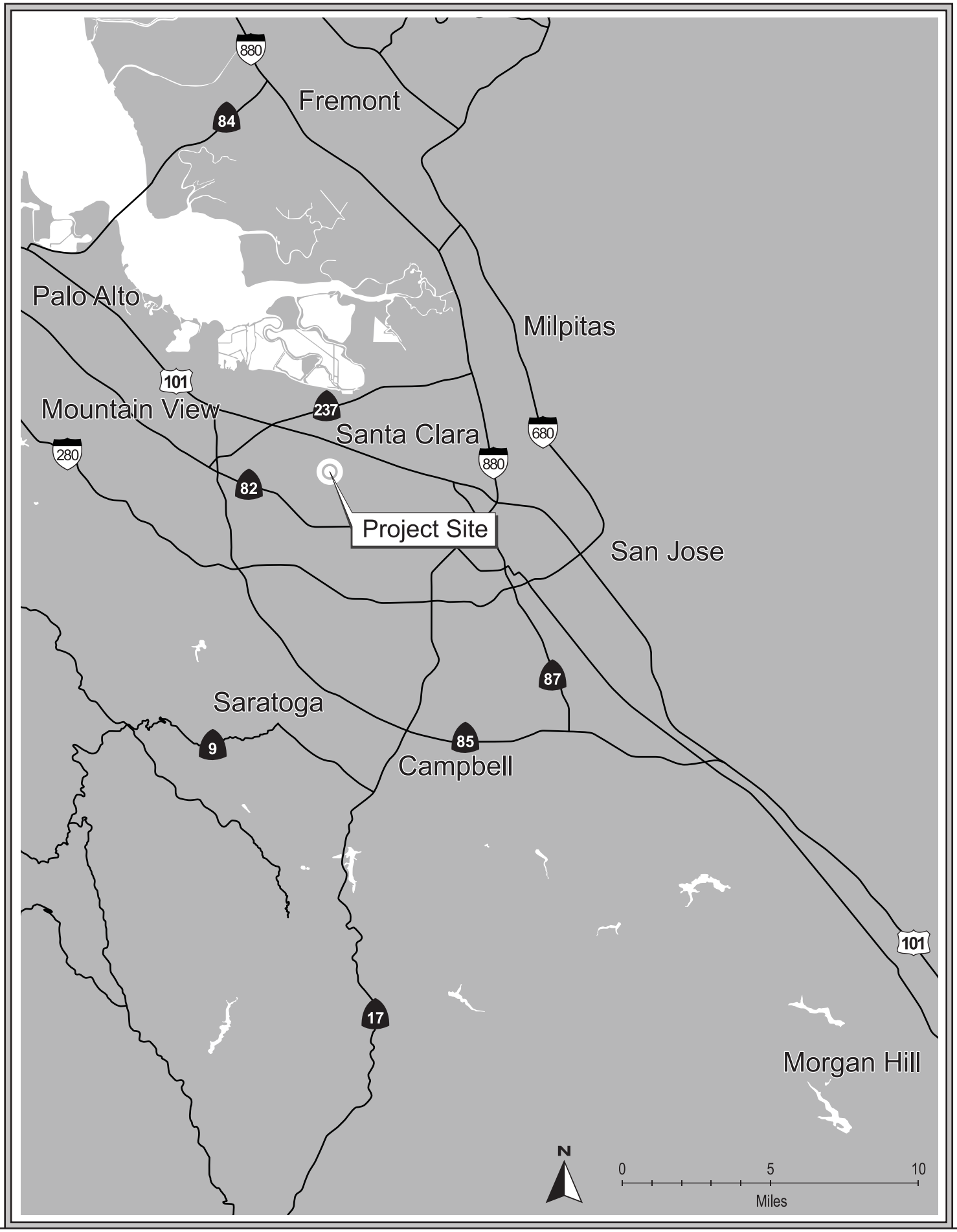
City of Santa Clara
Department of Planning and Inspection
Contact: Debby Fernandez
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2457

2.4 ASSESSOR'S PARCEL NUMBERS

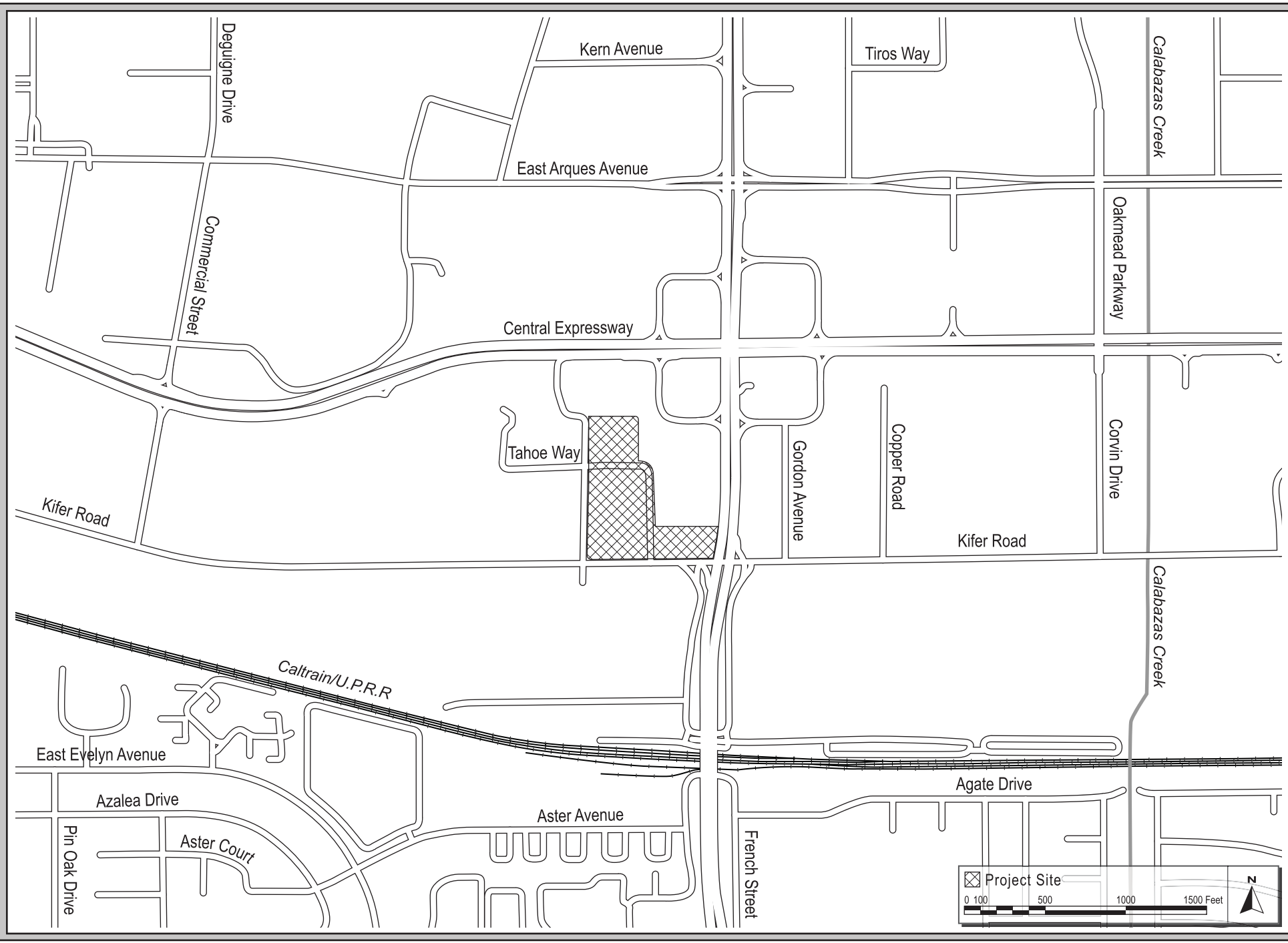
205-38-015, -021, and 205-38-022

2.5 ZONING DISTRICT AND GENERAL PLAN DESIGNATIONS

The project site is designated *Light Industrial* under the adopted General Plan and is zoned *ML – Light Industrial*.

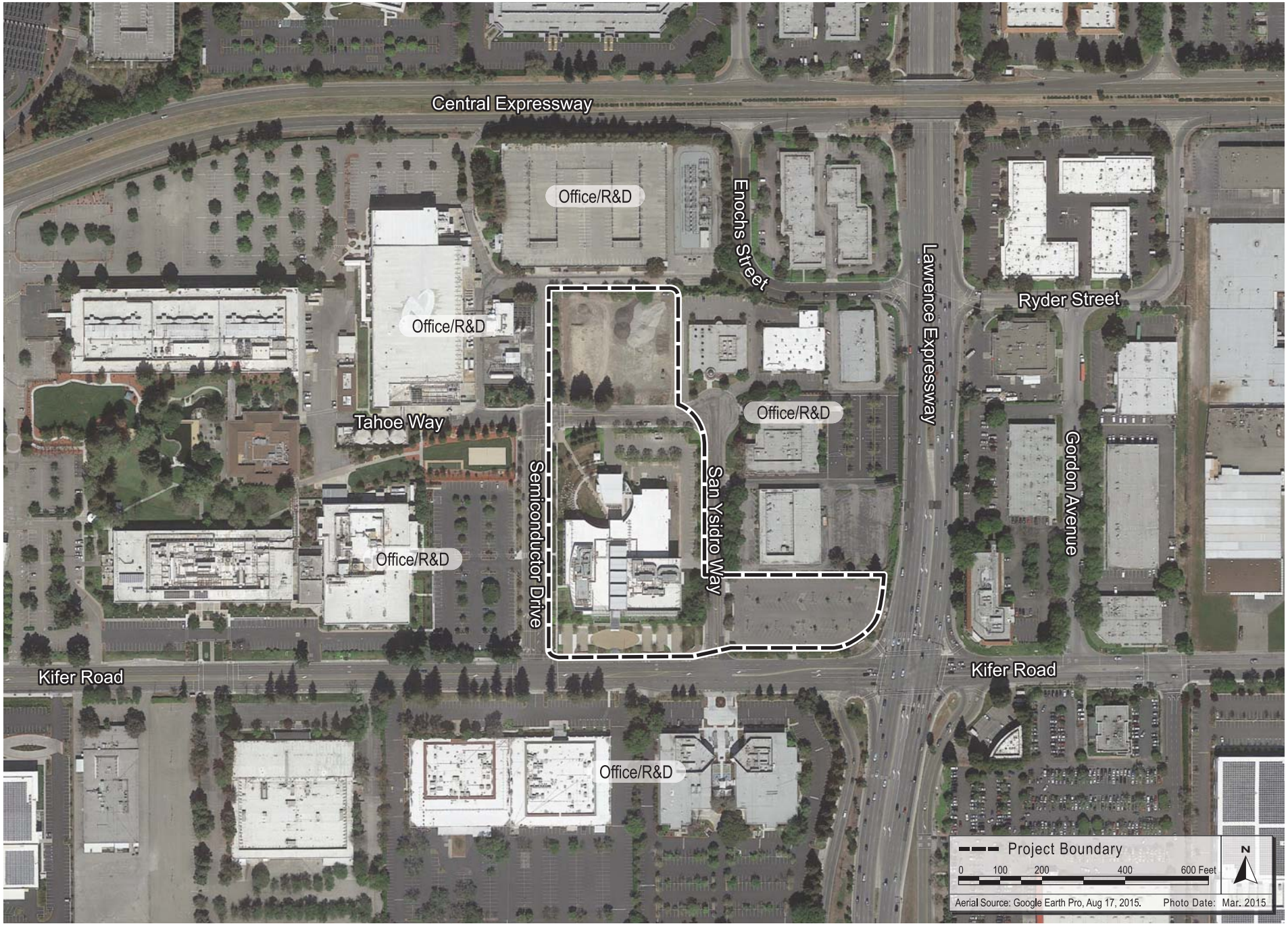


REGIONAL MAP FIGURE 2.2-1



VICINITY MAP

FIGURE 2.2-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.2-3

SECTION 3.0 PROJECT DESCRIPTION

The 7.68-acre project site is comprised of three parcels (APNs 205-38-015, -021, and -022) located at the northwest corner of Kifer Road and Lawrence Expressway in the City of Santa Clara. For the purposes of this discussion, the southeastern parcel (nearest the Kifer Road/Lawrence Expressway intersection) will be referred to as Parcel 1, the northernmost parcel (north of Tahoe Way) will be referred to as Parcel 2, and the southwestern parcel (between Semiconductor Drive and San Ysidro Way) will be referred to as Parcel 3. Parcel 1 is 1.56 acres in size, Parcel 2 is 1.74 acres, and Parcel 3 is 4.37 acres. The three parcels combined will collectively be referred to as the project site.

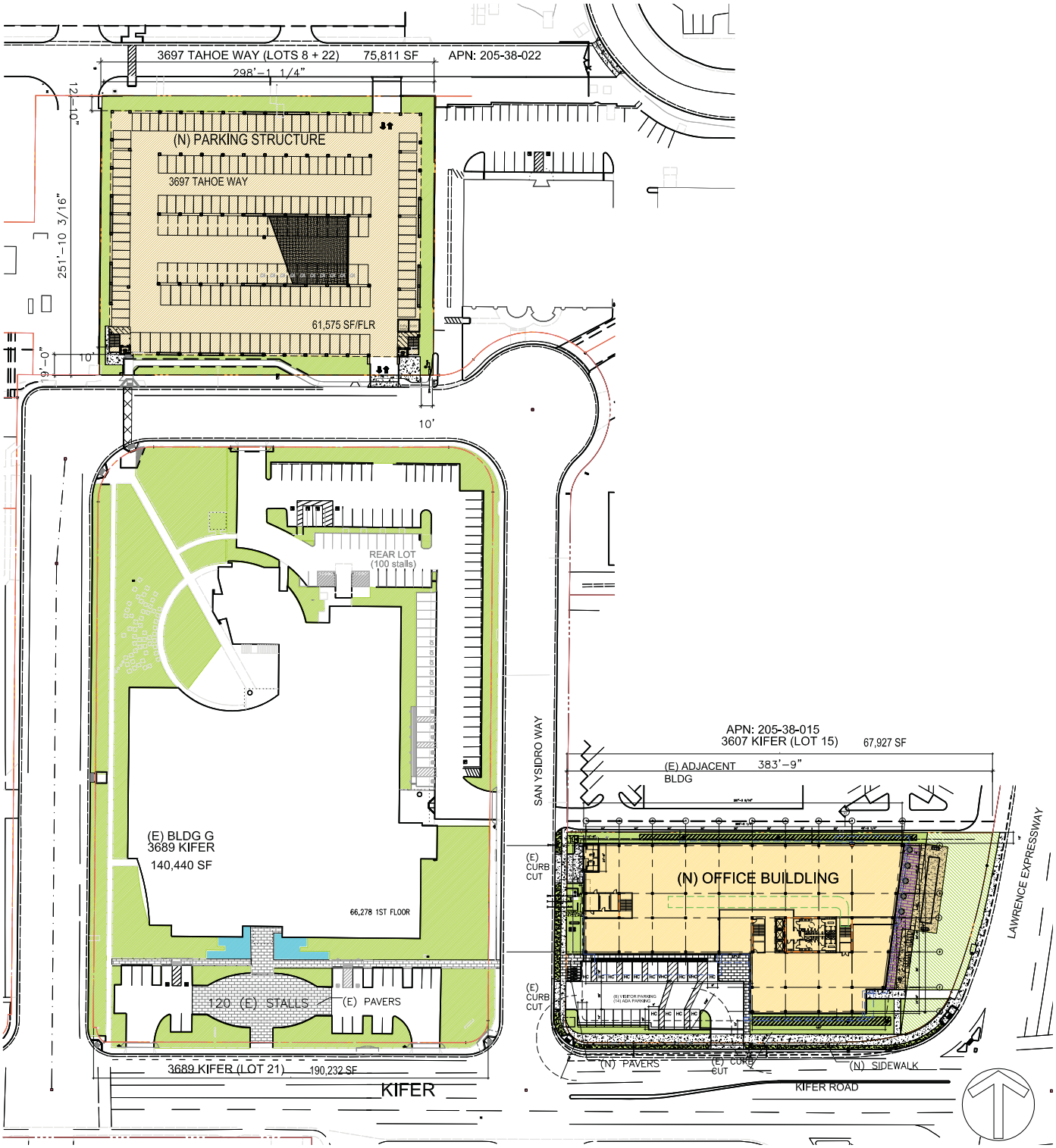
Parcels 1 and 2 were previously developed with office buildings. Parcel 1 had a 26,738 square foot office building and Parcel 2 had two office buildings totaling 32,480 square feet. The building on Parcel 1 was demolished in 2008, the other two buildings were demolished in February 2015. Both parcels are currently utilized as surface parking lots. Parcel 3 is developed with a three-story, 140,440 square foot office building and two surface parking lots. As proposed, the project would construct a five-story, 177,134 square foot office building on Parcel 1 and a five-level, 310,385 square foot parking garage on Parcel 2. No modifications are proposed on Parcel 3. These new structures, combined with the adjacent office building, would comprise a single corporate campus with both office buildings sharing the parking structure. The new office building would be 87.5 feet tall and the garage would be a maximum height of 53 feet. The combined total office space on-site would be 317,574 square feet with a floor area ratio (FAR) of 0.95. (see Figure 3.0-1)

The project would have a total of 1,130 parking spaces which would be provided in a combination of surface parking lots and structured garage parking. The new parking structure would have 988 parking spaces. The remaining 142 parking spaces would be provided in three surface lots adjacent to the office buildings. The existing office building currently has two surface lots with a total of 120 parking spaces. The new building would have a small 22-space parking lot along the Kifer Road frontage. The project would also include secure parking for 28 bicycles inside the new building and 10 exterior bike racks.

The new surface lot would be accessed by existing driveways on Kifer Road and San Ysidro Way. The parking structure would be accessed by two ingress/egress driveways on Tahoe Way. Access to the existing surface lots would not change.

The project site is designated *Light Industrial* under the adopted General Plan and is zoned *ML – Light Industrial*. The *Light Industrial* General Plan designation allows for a range of light industrial uses including general service, warehousing, storage, distribution, and manufacturing. The designation includes flexible space, such as buildings that allow a combination of single and multiple users, including warehouses, mini-storage, wholesale, bulk retail, gas stations, data centers, indoor auto-related uses and other uses that require large, warehouse-style buildings. Retail associated with the primary use may be included up to a maximum of 10 percent of the building area. Parking is typically in surface lots. The maximum FAR is 0.60.

The *ML – Light Industrial* zoning district (Chapter 18.38 of the City Code) is intended for commercial uses that are appropriate to major commercial thoroughfare or highway locations and are



SITE PLAN

FIGURE 3.0-1

dependent on thoroughfare travel as well as to encourage development of auto-oriented uses or other uses that are more suitable for individual auto access than for development within a shopping center.

Permitted uses under this district include auto sales and service, garages, motorcycle sales and service, motel/hotel, rental businesses, and auto accessory businesses.

The project will comply with all applicable City and State green building measures. Up to 55 trees are proposed to be removed as part of the project.

SECTION 4.0 SETTING, ENVIRONMENTAL CHECKLIST AND IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370). Measures that are proposed by the applicant that will further reduce or avoid already less than significant impacts are categorized as "Avoidance Measures."

4.1 AESTHETICS

4.1.1 Setting

4.1.1.1 Project Site

The project site is comprised of three parcels and is located in an office/industrial area. Parcels 1 and 2 are currently developed with surface parking lots. (see Photos 1 and 2) Parcel 3 is developed with a three-story office building and a surface parking lot. The office building has a modern design with the front façade comprised primarily of glass walls with metal framing, additional metal accents, and a prominent metal shade structure. The other building facades are metal and cement with vertical and horizontal banks of windows. (see Photo 3) Landscaping consists of trees, small shrubs, and grass along the street frontages of the project site and within the parking lots.

4.1.1.2 Surrounding Land Uses

Development in the project area is primarily office/R&D and industrial uses. The buildings vary in height from one to three stories and utilize a variety of building materials such as stucco, concrete, brick, metal, and glass. The project area is characterized by office and industrial buildings that are set back from the roadway with large surface parking lots, landscaped areas, and trees along the street frontages. (see Photos 4 and 5) Immediately north of Parcel 2 is a four-level parking garage (see Photo 6) and a substation.

4.1.1.3 Scenic Views and Resources

The project site and the surrounding area are relatively flat and, as a result, the site is only visible from the immediate area. The project area is not located within a designated scenic area or corridor based on the City of Santa Clara General Plan. There are no scenic views within the project area.

PHOTO 1: View of the parking lot on Parcel 1, looking east from San Ysidro Way.

PHOTO 2: View of the project site (Parcel 2), looking south from a private road.

PHOTOS 1 AND 2

PHOTO 3: View of the office building on Parcel 3 looking northeast from the Kifer Road/Semiconductor Drive intersection.

PHOTO 4: View of an office building on the south side of Kifer Road, looking south from Parcel 1.

PHOTOS 3 AND 4

PHOTO 5: View of industrial building west of Parcel 2, looking northwest from Tahoe Way.

PHOTO 6: View of a parking structure north of Parcel 2, looking north from Tahoe Way.

PHOTOS 5 AND 6

4.1.1.4 Light and Glare

Sources of light and glare are abundant in the urban environment of the project area, including, but not limited to, street lights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

4.1.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1,2,3
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1,2,3
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1,2,3
4. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1,2,3

4.1.2.1 Aesthetic Impacts

Implementation of the project would result in the removal of two surface parking lots and construction of a five-story office building on Parcel 1 and a five-level parking structure on Parcel 2. The office building would be taller than the surrounding development, making it visually prominent. The building would not, however, be out of character in this mixed industrial/commercial area. In addition, the project would substantially increase the amount of trees and other landscaping on-site.

Due to the proposed location of the parking structure, it will not be visually prominent from the primary roadways or most businesses. Views would be limited to persons traveling on Semiconductor Way, Tahoe Way, and San Ysidro Way, and the immediately adjacent buildings.

The project area is developed with office/industrial buildings with a mix of architectural styles and no particular design aesthetic being dominant. Because there is no predominant architectural style in the project area, the proposed building design would be compatible with the mixed visual character of the area. The final design of the project would be subject to the City's Architectural Review Committee. For these reasons, development of the project would not substantially degrade the existing visual character of the site or its surroundings. **(Less Than Significant Impact)**

There are no scenic vistas or scenic resources on-site. Implementation of the proposed project would not block views of any designated scenic vistas or scenic resources off-site. Therefore, the project would have no impact on scenic views. **(No Impact)**

Light and Glare

The project would include outdoor security lighting on the site, along walkways, driveways, and entrance areas and within the parking garage. The outside lighting would be comparable in brightness to the ambient lighting in the surrounding area. Increased lighting on the site, relative to the existing outdoor lighting, would increase the overall level of illumination in the area. The project would undergo architectural and site design review by Planning staff and the City's Architectural Review Committee prior to issuance of building permits to ensure that the project would not adversely affect the visual quality of the area or create a substantial new source of light or glare for adjacent businesses or persons traveling on the local roadways. Typical design requirements include directional and/or shielded lights to minimize the brightness and glare of the lights. **(Less Than Significant Impact)**

4.1.3 Conclusion

The project would have a less than significant impact on the visual character of the project area, and it would not impact any scenic resources. The project would not create significant additional sources of light or glare. Therefore, the project would have a less than significant visual impact. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FOREST RESOURCES

4.2.1 Setting

The project site is located in Santa Clara in an area designated for urban uses. According to the *Santa Clara County Important Farmlands 2010 Map*, the project site is designed as "Urban and Built-up Land."[1] The project site is not subject to a Williamson Act contract. There are no forest lands on or adjacent to the project site.

4.2.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	1-4
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1-3
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	1-3
4. Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1-3
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	1-3

4.2.2.1 Agricultural and Forest Resources Impacts

Implementation of the proposed project would result in construction of a new office building and parking structure on a currently developed site. The project will not convert *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* to non-agricultural uses. The project would not conflict with existing zoning for agricultural operations or facilitate unplanned conversion of farmland elsewhere in Santa Clara to non-agricultural uses. The project site is not utilized as forest

[1] "Urban and Built-up Land is defined as land with at least six structures per 10 acres and utilized for residential, institutional, industrial, commercial, landfill, golf course, and other urban-related purposes.

lands (nor are there forest lands in the vicinity) and would not result in the loss of forest lands in Santa Clara. For these reasons, the project would not result in a significant impact to agricultural or forest resources. **(No Impact)**

4.2.3 Conclusion

The project would not result in any impacts to agricultural or forest lands. **(No Impact)**

4.3 AIR QUALITY

4.3.1 Setting

4.3.1.1 Background Information

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine. The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution. These factors give the Bay Area a relatively high atmospheric potential for pollution.

The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. As shown in Table 4.3-1, violations of State and Federal standards at the monitoring station in Downtown San José (the nearest monitoring station to the project site) during the 2012-2014 period (the most recent years for which data is available) include high levels of ozone and $PM_{2.5}$.[2] Violations of carbon monoxide (CO) standards have not been recorded since 1992.[3]

TABLE 4.3-1
Number of Ambient Air Quality Standards Violations and Highest Concentrations (2012-2014)

Pollutant	Standard	Days Exceeding Standard		
		2012	2013	2014
SAN JOSÉ STATION				
Ozone	State 1-hour	1	1	0
	Federal 8-hour	0	1	0
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM_{10}	Federal 24-hour	0	0	0
	State 24-hour	1	5	1
$PM_{2.5}$	Federal 24-hour	2	6	2

The pollutants known to exceed the State and Federal standards in the project area are regional pollutants. Ozone (O_3), PM_{10}, and $PM_{2.5}$ are all considered regional pollutants because the concentrations are not determined by proximity to individual sources, but rather show a relative uniformity over a region.

[2] PM refers to Particulate Matter. Particulate matter is referred to by size (i.e., 10 or 2.5) because the size of particles is directly linked to their potential for causing health problems.
[3] Bay Area Air Quality Management District. Annual Bay Area Air Quality Summaries. <http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Air-Quality-Summaries.aspx> Accessed March 6, 2014.

The Bay Area as a whole does not meet State or Federal ambient air quality standards for ground level O_3 or State standards for $PM_{10,}$ and $PM_{2.5.}$ Based on air quality monitoring data, the California Air Resources Board (CARB) has designated Santa Clara County as a "nonattainment area" for O_3 and PM_{10} under the California Clean Air Act. The County is either in attainment or unclassified for other pollutants.

4.3.1.2 Toxic Air Contaminants

The Federal Clean Air Act defines Hazardous Air Pollutants (HAPs) as air contaminants identified by the U.S. EPA as known or suspected to cause cancer, serious illness, birth defects, or death. In California, Toxic Air Contaminants (TACs) include all HAPs, plus other contaminants identified by CARB are known to cause morbidity or mortality (cancer risk). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and Federal level. Unlike other emissions, TACs are measured based on the risk to human health rather than a set emission standard.

Diesel exhaust, a mixture of gases, vapors, and fine particles, is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). Diesel particulate matter (DPM) is of particular concern since it can be distributed over large regions, thus leading to widespread public exposure. CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks. These trucks represent the bulk of DPM emissions from California highways and include the solid waste collection vehicles, public and utility fleets, and the heavy-duty diesel truck and buses.

4.3.1.3 Sensitive Receptors

BAAQMD defines sensitive receptors as facilities where population groups that are particularly sensitive to the effects of air pollutants (i.e., children, the elderly, and people with illnesses) are likely to be located. Examples include schools, hospitals, and residential areas. There are no sensitive receptors adjacent to or in proximity to the project site. The nearest residences are approximately 1,450 feet south of the project site.

4.3.2 <u>Environmental Checklist and Discussion of Impacts</u>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,2,3,5
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,2,3,5,6

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,2,3,5
4. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1,2,3,5
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1,2,3

4.3.3 Air Quality Impacts

The analysis in this IS is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds for the San Francisco Bay Basin, including the thresholds listed in Table 4.3-2.

TABLE 4.3-2
Thresholds of Significance Used in Air Quality Analyses

Pollutant	Construction	Operation-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust (PM_{10}/$PM_{2.5}$)	BMPs	None	None
Risk and Hazards for New Sources and Receptors (Project)	Same as Operational Threshold	• Increased cancer risk of >10.0 in one million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	• Increased cancer risk of >100 in one million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	

Sources: *BAAQMD* CEQA *Thresholds Options and Justification Report (2009)* and *BAAQMD CEQA Air Quality Guidelines* (dated May 2012).

4.3.3.1 Bay Area 2010 Clean Air Plan

The most recent clean air plan is the *Bay Area 2010 Clean Air Plan* (2010 CAP) that was adopted by BAAQMD in September 2010. This plan addresses air quality impacts with respect to obtaining ambient air quality standards for non-attainment pollutants (i.e., O_3, PM_{10} and $PM_{2.5}$), reducing exposure of sensitive receptors to TACs, and reducing greenhouse gas (GHG) emissions such that the region can meet AB 32 goals of reducing emissions to 1990 levels by 2020. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the 2010 CAP, which were based on Association of Bay Area Governments (ABAG) Projections. The City's General Plan allows for light industrial uses with a maximum FAR of 0.60. The proposed project would be an office use with a FAR of 0.95 which is not consistent with the General Plan FAR of 0.60, but is generally consistent with the land use assumptions in the CAP.

The 2010 CAP includes about 55 control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. The control measures are divided into five categories that include:

- Measures to reduce stationary and area sources;
- Mobile source measures;
- Transportation control measures;
- Land use and local impact measures; and
- Energy and climate measures

The project would include new trees to mitigate the "urban heat island" effect, water efficient landscaping to reduce on-site water usage, and a Transportation Demand Management (TDM) [4] program as part of the proposed green building measures. In addition, the TDM program is a City requirement pursuant to General Plan policy 5.8.5-P1, which is consistent with the measures in the 2010 CAP. Per City policy, the TDM program would reduce the vehicles miles travel (VMT) from the project by 10 percent. The TDM measures proposed by the project include promoting alternative modes of transportation with on-site incentives such as showers for bicycle commuters and on-site amenities (such as a cafeteria and gym) to reduce traffic trips. Because the project would be required to implement a TDM program, is within proximity to multiple modes of existing transit and services, would include water efficient landscaping, would plant new trees, and would comply with all applicable green building requirements, it would not conflict with implementation of the 2010 CAP. **(Less Than Significant Impact)**

[4] Transportation Demand Management (TDM), as defined by the General Plan, refers to a comprehensive strategy to reduce driving by promoting alternatives such as public transit, carpooling, bicycling, walking, and telecommuting. Policies in the General Plan encourage both public and private-sector participation in TDM programs. Specific measures include promoting carpooling and vanpooling, car sharing and bicycle sharing programs, telecommuting, flexible/alternate work schedules, and on-site support services, such as child care and cafeterias.

4.3.3.2 Operational Impacts to Regional and Local Air Quality

Operational Emissions

The proposed project would construct a five-story, 177,134 square foot office building, a five-level parking garage, a surface parking lot, and site improvements. BAAQMD developed screening criteria to provide a conservative indication of whether a project could result in potentially significant air quality impacts (e.g., emissions of 54 pounds per day of ROG, NO_x, $PM_{2.5}$, and 82 pounds per day of PM_{10}). For operational impacts from criteria pollutants, the screening size is 346,000 square feet. Projects that are smaller than the screening size would have a less than significant operational air quality impact.

The project is below the screening size for the proposed land use. Therefore, the project will have a less than significant operational air quality impact. **(Less Than Significant Impact)**

Carbon Monoxide Emissions

Carbon monoxide (CO) emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high localized concentrations of CO. BAAQMD screening criteria indicate that a project would have a less than significant impact to CO levels if project traffic would not increase traffic levels at any affected intersection to more than 44,000 vehicles per hour. The project would result in a net increase of approximately 1,758 daily traffic trips and would not cause any intersections to exceed 44,000 vehicles per hour. Therefore, the project would not result in significant CO impacts. **(Less Than Significant Impact)**

Community Risk Impacts

Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level. The project site is not located near any sensitive receptors that could be exposed to TACs or $PM_{2.5}$ sources from the project site. Also, the proposed project would not include any sensitive users. Therefore, operation of the proposed project would not adversely impact the health of future users as a result of automobile and truck emissions on nearby roadways or emissions from building generators. **(Less Than Significant Impact)**

4.3.3.3 Construction Impacts

Community Risk Impacts

Emissions from construction-related automobiles, trucks, and heavy equipment are a primary concern due to release of DPM, organic TACs from all vehicles, and $PM_{2.5}$, which is a regulated air pollutant. The nearest sensitive receptors are located 1,450 feet south of the project site. Due to the distance between sensitive receptors and the project site and the temporary nature of the construction activities, the proposed project would have a less than significant community risk impact due to construction. **(Less Than Significant Impact)**

Construction-Related Emissions

BAAQMD has developed screening criteria to provide a conservative indication of whether construction activities associated with a project could result in potentially significant air quality impacts. For construction-related emissions, the screening size is 277,000 square feet of office space. Projects that are smaller than the screening size are considered to have a less than significant construction-related air quality impact.

The project is below the construction-related screening size for office development. Therefore, the project would have a less than significant construction air quality impact. **(Less Than Significant Impact)**

Dust Generation

Construction activities on the site would include demolition of the existing structures and hardscape, and grading of the site which would generate dust and other particulate matter. The generation of dust and other particulate matter would temporarily increase dust in the project area.

The project is not located close enough to sensitive receptors that they could be adversely impacted by construction dust. Nevertheless, the following measures are included in the project, consistent with BAAQMD best management practices, to further reduce construction dust generation and other particulate matter.

<u>Project Specific Avoidance Measures</u>

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- Post a publicly visible sign with the telephone number for a Disturbance Coordinator, established by the project applicant, regarding dust complaints. The Disturbance Coordinator shall be available 24 hours a day, seven days a week to respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project would have a less than significant temporary construction air quality impact. **(Less Than Significant Impact)**

Odors

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor of these emissions may be noticeable from time to time by adjacent receptors. Odors would, however, be localized and temporary and are not likely to affect people off-site.

The project site is not located near businesses that would cause incompatible odor issues. **(Less Than Significant Impact)**

4.3.4 Conclusion

The project would not result in significant operational or construction-related regional or local air quality impacts, conflict with applicable air quality plans and standards, or expose sensitive receptors to substantial pollutant concentrations. **(Less Than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

4.4.1 Setting

The project site is located in an urban area in the City of Santa Clara. There are no waterways, wetlands, or other sensitive habitats located on or adjacent to the project site. The nearest waterways are Calabazas Creek, located approximately 0.5 miles east of the project site, and Guadalupe River, located approximately 3.5 miles east of the project site. In the vicinity of the project site, Calabazas Creek is a fully channelized waterway with no riparian vegetation. The project site is completely developed and is surrounded by industrial and commercial/office development.

Vegetation in the project area includes landscaping which primarily consists of grass, shrubs, and trees. Wildlife habitats in developed urban areas, such as the project site, are low in species diversity and include predominantly urban adapted birds and animals. There are no sensitive habitats or special status plant or animal species on-site, due to a lack of habitat to support them.

4.4.1.2 Special Status Species

Special status plant and wildlife species are not present on the highly urbanized project site, although raptors (birds of prey) and other birds could use trees on the site for nesting or foraging. Raptors and other migratory birds are protected by the Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.).

4.4.1.1 Conservation Plans

The project site is not located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP) or other approved local, regional, or State habitat conservation plan.

4.4.1.2 Trees

Mature trees (both native and non-native) are valuable to the human environment for the benefits they provide for resisting global climate change (i.e., carbon dioxide absorption), because they provide nesting and foraging habitat for raptors and other migratory birds, and because they are a visual enhancement. Therefore, a tree survey was completed to document and evaluate the mature trees on the site.

Trees located on the project site are non-native species that vary in size and health. The City's policy is to protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size and all other trees over 36 inches in circumference (approximately 11 inches in diameter) as measured from 48 inches above the ground surface. Within the boundaries of the project site, there are a total of 80 trees. Of the 80 trees, there are 29 crape myrtle hybrids; 13 Chinese pistaches; eight of each of the following: European olives, redwoods, and Chinese tallows; five Brisbane boxes; three Canary Island pines; and two of each of the following: ashes, London planes, and mulberries.

The following table (Table 4.4-1) lists all trees identified on-site during a tree survey completed by *David J. Powers & Associates*. The locations of the trees are shown on Figure 4.4-1.

Table 4.4-1 Tree Survey			
Tree No.	**Scientific Name**	**Common Name**	**Circumference***
1	*Olea europaea*	European olive	115
2	*Olea europaea*	European olive	67
3	*Olea europaea*	European olive	111
4	*Olea europaea*	European olive	104
5	*Olea europaea*	European olive	117
6	*Olea europaea*	European olive	115
7	*Olea europaea*	European olive	125
8	*Olea europaea*	European olive	70
9	*Pinus canariensis*	Canary Island pine	21
10	*Pinus canariensis*	Canary Island pine	76
11	*Pinus canariensis*	Canary Island pine	56
12	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	10
13	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	7
14	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	42
15	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	11
16	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	10
17	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	9
18	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	11
19	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	10
20	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	8
21	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
22	*Pistacia chinensis*	Chinese pistache	4
23	*Pistacia chinensis*	Chinese pistache	4
24	*Pistacia chinensis*	Chinese pistache	4
25	*Fraxinus sp.*	Ash	50
26	*Fraxinus sp.*	Ash	52
27	*Sequoia sempervirens*	Redwood	190
28	*Sequoia sempervirens*	Redwood	130
29	*Sequoia sempervirens*	Redwood	188
30	*Sequoia sempervirens*	Redwood	165
31	*Sequoia sempervirens*	Redwood	178
32	*Sequoia sempervirens*	Redwood	47
33	*Sequoia sempervirens*	Redwood	158
34	*Sapium sebiferum*	Chinese tallow	29
35	*Sapium sebiferum*	Chinese tallow	31
36	*Sapium sebiferum*	Chinese tallow	41
37	*Sapium sebiferum*	Chinese tallow	29
38	*Sapium sebiferum*	Chinese tallow	40
39	*Sapium sebiferum*	Chinese tallow	36
40	*Sapium sebiferum*	Chinese tallow	35
41	*Sapium sebiferum*	Chinese tallow	36
42	*Platanus x acerfolia*	London Plane	45
43	*Platanus x acerfolia*	London Plane	47
44	*Pistacia chinensis*	Chinese pistache	4
45	*Sequoia sempervirens*	Redwood	74
46	*Pistacia chinensis*	Chinese pistache	4

TREE MAP

FIGURE 4.4-1

Table 4.4-1 Tree Survey			
Tree No.	**Scientific Name**	**Common Name**	**Circumference***
47	*Tristania conferta*	Brisbane Box	39
48	*Morus alba*	Mulberry	125
49	*Tristania conferta*	Brisbane Box	38
50	*Tristania conferta*	Brisbane Box	32
51	*Morus alba*	Mulberry	98
52	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
53	*Tristania conferta*	Brisbane Box	26
54	*Tristania conferta*	Brisbane Box	42
55	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	2
56	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
57	*Pistacia chinensis*	Chinese pistache	3
58	*Pistacia chinensis*	Chinese pistache	4
59	*Pistacia chinensis*	Chinese pistache	3
60	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
61	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
62	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	2
63	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
64	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
65	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
66	*Pistacia chinensis*	Chinese pistache	4
67	*Pistacia chinensis*	Chinese pistache	4
68	*Pistacia chinensis*	Chinese pistache	4
69	*Pistacia chinensis*	Chinese pistache	3
70	*Pistacia chinensis*	Chinese pistache	4
71	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
72	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
73	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
74	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
75	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	3
76	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	5
77	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	5
78	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	5
79	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	5
80	*Lagerstroemia fauriei hybirds*	Crape Myrtle hybrid	21

*Circumference in inches measured approximately 48 inches above ground.

4.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
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 Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	1-3
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 Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	1-3
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	1-3
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, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1-3
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1,2,3,7
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?	☐	☐	☐	☒	1-3

4.4.2.1 Biological Resources Impacts

Because of the history of development in the project area, no natural or sensitive habitats are present on the project site. As a result, no substantial impacts to natural plant communities or habitats would occur as a result of the project. Therefore, the project would not conflict with any local policies or ordinances that protect biological resources. **(No Impact)**

The project site and the immediate project area do not have any identified special or threatened species habitat. Therefore, the proposed project would not impact special status species. **(No Impact)**

The project site is not located in proximity to any riparian corridors and, therefore, would not have a substantial adverse effect on riparian habitats in the City. **(No Impact)**

The project site is not located near any wetlands and would not affect any federally protected wetlands. **(No Impact)**

The project site is not located within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. **(No Impact)**

Nesting Raptors and Migratory Birds

Migratory birds, like nesting raptors, are protected under the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503, 3503.5, and 2800. The California Department of Fish and Wildlife (CDFW)[5] defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance.

While the project site is located within an urban environment, the mature trees on-site and on the adjacent properties could provide nesting and/or foraging habitat for raptors and migratory birds. Therefore, construction of the proposed project may result in loss of fertile eggs or nestlings or lead to nest abandonment.

Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors or other migratory birds, or nest abandonment. **(Significant Impact)**

Mitigation and Avoidance Measures

Project Specific Mitigation Measures

The following mitigation measures will be implemented during all demolition and construction activities to avoid abandonment of raptor and other protected migratory birds' nests:

MM BIO-1.1: All demolition and construction activities shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1 through August 31.

MM BIO-1.2: If it is not possible to schedule all demolition and construction activities between September and January, pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. This survey shall be completed no

[5] Formally the California Department of Fish and Game.

more than 14 days prior to the initiation of construction related activities during the early part of the breeding season (February 1 through April 30) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1 through August 31). During this survey, the ornithologist will inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with California Department of Fish and Wildlife, will determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests will not be disturbed during project construction.

Implementation of the identified mitigation measures would reduce construction impacts to migratory birds to a less than significant level. **(Less Than Significant Impact with Mitigation)**

4.4.2.2 Trees

Of the 80 trees on-site, 25 trees located around the perimeter of Parcel 2 are proposed to be retained. Of the 55 trees to be removed, 13 trees are classified as protected by the City due to their size or species.

The City's General Plan (Policy 5.3.1-P10) requires new development to include new street trees and at least a 2:1 on- or off-site replacement for removal of existing trees. The proposed project would be required as a condition of project approval to plant a minimum of 110 trees. This would offset the loss of the trees to be removed as a result of the project. Because the project would be required to comply with the City's tree replacement policy, the loss of these trees on-site would have a less than significant impact. **(Less Than Significant Impact)**

4.4.3 Conclusion

The project site is not located in any approved local, state, or national habitat conservation plan. **(No Impact)**

The project site is not near any wetlands, and therefore, implementation of the proposed project would not affect any federally protected wetlands. **(No Impact)**

There are no threatened or special status species on the project site, and as a result, the proposed project would not directly or indirectly impact any special status species habitat to a significant level. **(No Impact)**

The project would plant new trees to offset the loss of existing trees on-site and implement the identified mitigation measures to reduce and avoid impact to raptor nesting and/or foraging habitat due to project construction. With implementation of the identified mitigation measures, the project would not result in significant impacts to biological resources. **(Less Than Significant Impact with Mitigation)**

4.5 CULTURAL RESOURCES

4.5.1 Setting

Although there are no existing conditions or immediate evidence that would suggest the presence of subsurface historic or prehistoric resources, the project site is located in a culturally sensitive area due to known prehistoric and historic occupation of Santa Clara.

Prehistoric Resources

Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley and they often established settlements near local waterways. The project site is located approximately 0.5 miles west of Calabazas Creek and 3.5 miles west of the Guadalupe River. The distance between the site and the nearest waterway decreases the likelihood that subsurface artifacts may be located on the project site.

Historic Resources

The office building on-site was constructed in 2000, making it 15 years old.[6] The building is less than 50 years old and would not be eligible for the California or National Registers. The structure has not been identified by the City of Santa Clara as architecturally or historically significant. In addition, there are no designated historic structures immediately adjacent to the project site.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. The project site is underlain by Holocene (basin) soil deposits. Geologic units of Holocene age are generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils. These sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

4.5.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	1-3

[6] The age of the building was ascertained using the data available from the City of Santa Clara on-line permit center. http://santaclaraca.gov/index.aspx?page=1015 Accessed August 10, 2015.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☒	☐	☐	1-3
3. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒	1-3
4. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1-3

4.5.2.1 Impacts to Cultural Resources

Subsurface Prehistoric and Historic Resources

The site has a low potential for containing prehistoric archaeological resources due to the distance from Calabazas Creek (0.5 miles) and Guadalupe River (3.5 miles east). Development on the project site over the last 47 years[7] has failed to generate reports of any archaeological finds; however, demolition of the existing pavement on Parcels 1 and 2 could uncover and damage as yet unrecorded subsurface resources under the building footprint.

Impact CUL – 1: Subsurface cultural resources could be uncovered during demolition/construction of the proposed project. **(Significant Impact)**

Mitigation and Avoidance Measures

Project Specific Mitigation Measures

The following mitigation measures will be implemented during construction to avoid significant impacts to unknown subsurface cultural resources.

MM CUL-1.1: A qualified archaeologist will be on site to monitor the initial excavation of native soil once all pavement and engineered soil is removed from the project site. After monitoring the initial excavation, the archaeologist will make recommendations for further monitoring if it is determined that the site has cultural resources. If the archaeologist determines that no resources are likely to be found on site, no additional monitoring will be required.

MM CUL-1.2: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Planning and Inspection will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations

[7] Development of the site began in 1968.

could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Planning and Inspection.

MM CUL-1.3: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of these measures, impacts to unknown subsurface prehistoric, historic, and archaeological resources would be less than significant. **(Less Than Significant Impact with Mitigation)**

Historic Structures

There are no historic structures on or immediately adjacent to the project site and no structures are proposed for demolition as part of the project. Therefore, implementation of the proposed project would have no impact on any designated historic structures. **(No Impact)**

Paleontological Resources

Excavation on-site would not exceed 10 feet in depth and it is improbable that paleontological resources would be discovered on-site due to the distance of the site from the San Francisco Bay and local waterways. In addition, no paleontological resources have been discovered in the area of Santa Clara. **(No Impact)**

4.5.3 Conclusion

Implementation of the proposed project would result in no impact on historic structures and paleontological resources. **(No Impact)**

With implementation of the identified mitigation measures described above, the proposed project would have a less than significant impact on subsurface prehistoric, historic, and archaeological resources. **(Less Than Significant Impact with Mitigation)**

4.6 GEOLOGY AND SOILS

4.6.1 Setting

4.6.1.1 Geology and Soils

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountains Range to the east, and the San Francisco Bay to the north. The valley's basin contains alluvial deposits derived from the Diablo Range and the Santa Cruz Mountains.

Soils beneath the project site are comprised primarily of Castro clay (Cf)[8], which is characterized by moderate expansion potential and poor natural drainage.[9] Expansive soils shrink and swell as a result of moisture changes. Since there are no unique geologic features on or adjacent to the project site and the topography of the project area is relatively flat, the potential for erosion or landslide on or adjacent to the site is low.

4.6.1.2 Seismicity and Seismic Hazards

The project site is located within the seismically active San Francisco Bay Region. Based on a 2014 forecast completed by the U.S. Geological Survey, there is a 72 percent probability that one or more major earthquakes (magnitude of 6.7 or greater) will occur in the San Francisco Bay Area by 2044.[10] Therefore, it is expected that earthquakes in the region could produce very strong ground shaking in the project area during the life of the proposed project. All major faults in the region are capable of generating earthquakes of magnitude 6.7 or greater.

TABLE 4.6-1
Active Faults Near the Project Site

Fault	Distance from Site
Hayward (Southeast Extension)	8.9 miles
Calaveras	11.9 miles
Monte Vista - Shannon	5.6 miles
San Andreas	9.4 miles

The project area is not located within the Alquist-Priolo Earthquake Fault Zone[11], the Santa Clara County Geologic Hazard Zone or the City of San José Potential Hazard Zone[12] and no active faults have been mapped on the project site. The risk of fault rupture is low. Faults in the region are, however, capable of generating earthquakes of magnitude 7.0 or higher and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. Active faults near the project site are shown in Table 4.6-1.

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[8] Santa Clara County. *Soils Maps. Panel 11, 12N/03E.* 1964.
[9] United States Department of Agriculture & Soil Conservation Service. *Soils of Santa Clara County. General Soil Map.* 1968.
[10] U.S. Geological Survey. *UCERF3: A New Earthquake Forecast for California's Complex Fault System*. Fact Sheet 2015–3009. March 2015. Available at: <http://pubs.er.usgs.gov/publication/fs20153009>. Accessed Sept 8, 2015.
[11] California Department of Conservation Website. <http://www.quake.ca.gov/gmaps/ap/ap_maps.htm> Accessed September 8, 2015.
[12] Santa Clara County, *Santa Clara County Geologic Hazard Zones*, Map 20, 2002. <http://www.sccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf> Accessed September 8, 2015.

Liquefaction and Lateral Spreading

Liquefaction

Liquefaction occurs when water-saturated soils lose structural integrity due to seismic activity. Factors that contribute to liquefaction include soil age, soil type, soil cohesion, soil density, and depth to groundwater. Soils that are saturated, uniformly graded, and loose are more susceptible to liquefaction. The project site is located within a potential liquefaction zone.[13]

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal ground movement of flat-lying soil deposits towards a free face (i.e. a deep excavation, a river channel, or an open sea). Since the nearest free face, Calabazas Creek, is approximately 0.5 miles east of the project site. At this distance, the potential for lateral spreading on-site is low.

4.6.1.3 Groundwater

Based on nearby monitoring wells, groundwater is a minimum of eight feet below ground surface (bgs).[14] Seasonal fluctuations, drainage patterns, and other factors can affect the groundwater level.

4.6.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐	1-3
b. Strong seismic ground shaking?	☐	☒	☐	☐	1-3
c. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1-3
d. Landslides?	☐	☐	☒	☐	1-3
2. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1-3

[13] Ibid.
[14] Engeo. *Phase I Environmental Site Assessment*. October 27, 2014.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
3. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	1,2,3,8
4. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☒	☐	1,2,3,8
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1

4.6.2.1 Geological Impacts

Soil Hazards

The project site and surrounding areas are flat and there are no waterways in the vicinity. The project would not, therefore, be exposed to landslide or erosion related hazards. The project site has moderately expansive soils. Expansive soils swell when the water content is increased and shrink when it decreases. This condition could harm building foundations and on-site improvements and would require special building design considerations. The possible geologic and soils impacts resulting from conditions on the site can be mitigated by utilizing standard engineering and construction techniques. Therefore, the project would not expose people or property to significant impacts associated with the geologic conditions of the site. **(Less Than Significant Impact)**

The project would be connected to the City's existing sanitary sewer system and would not use any septic tanks or alternative wastewater disposal systems (refer to Section 4.17, *Utilities and Service Systems*). Therefore, the on-site soils would not be impacted by these alternative wastewater systems. **(No Impact)**

Seismic Hazards

As stated above, the project site is located within the seismically active San Francisco Bay region. While the site is not located on or near a major earthquake fault, severe ground shaking is probable during the useful life of the proposed buildings. The soils present on the project site have a moderate potential for liquefaction and low potential for lateral spreading.

Impact GEO - 1: The project site is located in a seismically active region and, as a result, strong ground shaking would be expected to occur during the useful life of the proposed project. **(Significant Impact)**

Mitigation and Avoidance Measures

The following measure is included in the project to reduce impacts associated with seismic ground shaking:

MM GEO-1.1: The project applicant will be required to submit a project-specific geotechnical engineering study to the City of Santa Clara for review and approval prior to the issuance of building permits. The project applicant shall comply with the specific design measures of the geotechnical report to ensure building integrity in the event of seismic activity and possible liquefaction.

4.6.2.2 Construction Impacts

Construction activities (excavation and grading) could temporarily increase sedimentation and erosion by exposing on-site soils to wind and runoff.

Impact GEO - 2: Implementation of the proposed project could increase erosion and sedimentation until construction is complete and new vegetation is established. **(Significant Impact)**

Mitigation and Avoidance Measures

The following measures are included in the project to reduce construction-related erosion impacts:

MM GEO-2.1: All excavation and grading work will be scheduled in dry weather months, or construction sites will be weatherized to withstand or avoid erosion.

MM GEO-2.2: Stockpiles and excavated soils will be covered with secured tarps or plastic sheeting.

MM GEO-2.3: Vegetation in disturbed areas will be replanted as quickly as possible.

4.6.3 Conclusion

Implementation of the proposed mitigation measures will reduce geologic and soils impacts to a less than significant level. **(Less Than Significant Impact With Mitigation)**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/ manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.2 Regulatory Background

4.7.2.1 State of California

State of California Executive Order S-3-05

In June 2005, Governor Schwarzenegger issued Executive Order S-3-05, which identified CalEPA as the lead coordinating State agency for establishing GHG emission reduction targets in California. A "Climate Action Team," a multi-agency group was set up to implement Executive Order S-3-05. Under this order, the State plans to reduce GHG emissions to 80 percent below 1990 levels by 2050.

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

California Assembly Bill (AB) 32, the California Global Warming Solutions Act, was signed into law in September 2006. With the passage of AB 32, the State of California made a commitment to reduce GHG emissions to 1990 levels by 2020, which represents about a 30 percent decrease over current levels. CARB's Discrete Early Actions include maximizing energy efficient building and appliance standards, pursuing additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursuing comparable investment in energy efficiency by all retail providers of electricity in California (including both investor-owned and publicly-owned utilities). In December 2008, CARB approved the Climate Change Scoping Plan, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals.

On May 22, 2014, CARB adopted an updated Scoping Plan document. The 2014 update defines CARB's climate change priorities for the next five years and lay the groundwork to start the transition to the post-2020 goals set forth in Executive Order S-3-05 and B-16-2012.[15] The 2014 update highlights California's progress toward meeting the near-term 2020 GHG reduction goals defined in the 2008 Scoping Plan and evaluate how to align the State's longer-term GHG reduction strategies with other State policy priorities such as for water, waste, natural resources, agriculture, clean energy, transportation, and land use.

[15] Executive Order B-16-2012, issued by Governor Brown in March 2012, calls for expanded infrastructure to support zero emission vehicles and sets benchmarks for future state fleet vehicle purchases of zero emission vehicles. The executive order is available online at: http://gov.ca.gov/news.php?id=17472

Senate Bill 375

Senate Bill 375 (SB 375), also known as the Sustainable Communities and Climate Protection Act of 2008, requires regional transportation plans to include a Sustainable Communities Strategy (SCS) that links transportation and land use planning together into a more comprehensive, integrated process. The SCS is a mechanism for more effectively linking a land use pattern and a transportation system together to make travel more efficient and communities more livable. The result is reduced GHG emissions from passenger vehicles along with other benefits. The target for the Bay Area is a seven percent per capita reduction in GHG emissions attributable to automobiles and light trucks by 2020 and a 15 percent per capita reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) and ABAG adopted *Plan Bay Area* in July 2013 as part of the Regional Transportation Plan (RTP) process. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The project site is not located in a PDA.

4.7.2.2 2010 Bay Area Clean Air Plan

The Bay Area 2010 Clean Air Plan (CAP) is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The 2010 CAP includes emission control measures in five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures, Land Use and Local Impact Measures, and Energy and Climate Measures. Consistency of a project with current control measures is determined by its consistency with the CAP. The current CAP also includes performance objectives, consistent with the State's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

4.7.2.3 City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the reduction of GHG emissions during the planning horizon of the General Plan. Goals and policies that address sustainability (see Appendix 8.13: Sustainability Goals and Policies Matrix in the General Plan) are aimed at reducing the City's contribution to GHG emissions. As described below, the development of a comprehensive GHG emissions reduction strategy for the City is also included in the General Plan.

Climate Action Plan

The City of Santa Clara has a comprehensive GHG emissions reduction strategy (Climate Action Plan) to achieve its fair share of statewide emissions reductions for the 2020 timeframe consistent with AB 32, the Global Warming Solutions Act. The Climate Action Plan (CAP) was adopted on December 3, 2013. The City of Santa Clara CAP specifies the strategies and measures to be taken for a number of focus areas (coal-free and large renewables, energy efficiency, water conservation, transportation and land use, waste reduction, etc.) citywide to achieve the overall emission reduction

target, and includes an adaptive management process that can incorporate new technology and respond when goals are not being met.

A key reduction measure that is being undertaken by the City of Santa Clara under the CAP is in the *Coal-Free and Large Renewables* focus area. The City of Santa Clara operates Silicon Valley Power (SVP), a publicly owned utility that provides electricity for the community of Santa Clara, including the project site. Since nearly half (48 percent) of Santa Clara's GHG emissions result from electricity use, removing GHG-intensive sources of electricity generation (such as coal) is a major focus area in the CAP for achieving the City's GHG reduction goals. This measure is being undertaken by SVP.

CEQA clearance for all discretionary development proposals are required to address the consistency of individual projects with reduction measures in the CAP and goals and policies in the General Plan designed to reduce GHG emissions. Compliance with appropriate measures in the CAP would ensure an individual project's consistency with an adopted GHG reduction plan. Projects that are consistent with the CAP would have a less than significant impact related to GHG emissions.

4.7.3 Setting

The project site is currently developed with an office building and two large surface parking lots. GHG emissions are generated by daily traffic trips to and from the site, as well as operation of the office building which uses electricity and water.

4.7.4 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
6. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,2,3,9
7. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1,2,3,9

4.7.4.1 Greenhouse Gas Emissions Impacts

Worldwide GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Santa Clara, the entire State of California, and across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Per the CEQA Guidelines Section 15064 (b), a Lead Agency may analyze and mitigate significant GHG emissions in a plan for the reduction of GHG emissions that has been adopted in a public

process following environmental review. The City of Santa Clara adopted its CAP (a GHG reduction strategy) in 2013 which is in conformance with its most recent General Plan Update. The City's projected emissions and the CAP are consistent with measures necessary to meet statewide 2020 goals established by AB 32 and addressed in the Climate Change Scoping Plan. The threshold of significance for whether a development project in the City of Santa Clara would generate GHG emissions that would have a significant impact on the environment, therefore, would be whether or not the project conforms to the applicable reduction measures in the City's CAP.

The proposed project would include GHG emissions from construction and operation of the project. The GHG emissions from the project would include:

- Construction emissions;
- Emission from the manufacture and transport of building materials;
- Mobile emissions (e.g., emissions from combustion of fossil fuels for vehicle trips to and from the site); and
- Emissions from the generation of electricity to operate lighting, appliances, and HVAC on the site and to convey water to the site.

4.7.4.2 Operational Greenhouse Gas Emissions

Plans, Policies, and Regulations

As described previously, the *City of Santa Clara Climate Action Plan*, which is part of the City's General Plan, identifies a series of GHG emissions reduction measures to be implemented by development projects that would allow the City to achieve its GHG reduction goals. The measures center around seven focus areas: coal-free and large renewables, energy efficiency, water conservation, waste reduction, off-road equipment, transportation and land use, and urban heat island effect. Of these seven focus areas, five are applicable to private development projects. The project's conformance with applicable reduction measures for new office developments is discussed below.

Water Conservation Measures

Measure 3.1 Water Conservation calls for reduction in per capita water use to meet Urban Water Management targets by 2020. Development standards for water conservation will be applied to increase efficiency in indoor and outdoor water uses. The project would comply with Title 24 Standards which requires insulated water heater systems to reduce energy and water use. In addition, the proposed project would include water efficient landscaping with low water usage plant material to minimize irrigation requirements.

Waste Reduction Measures

Measure 4.2 Increase Waste Diversion calls for expansion of recycling efforts, curbside food waste pickup, and construction and demolition waste programs to increase solid waste diversion from landfills from 58 to 80 percent citywide. The project would meet the City's solid waste diversion goal.

Transportation and Land Use Measures

Measure 6.3 Electric Vehicle Parking calls for the provision of electrical vehicle (EV) charging stations in new multi-family residential and nonresidential developments. The project includes a TDM program that would reduce the traffic trips from the project by 10 percent. The project would include electric charging stations consistent with this measure.

Urban Heat Island Effect

Measure 7.1 Urban Forestry requires planting of shade trees on new developments and encourages shade trees to be planted near south-facing windows.

Measure 7.2 Urban Cooling calls for the use of materials to reduce heat gain and mitigate the urban heat island effect.

The project proposes design features and new landscaping, including shade trees, to reduce the heat island effect.

While the proposed development would result in a net increase in traffic trips and an increase in energy usage compared to the existing site conditions, the project is consistent with the General Plan land use assumptions and would include GHG reduction strategies. As a result, the project is consistent with the CAP and would not preclude the City from reaching its GHG emissions reduction goals. Operation of the proposed project would have a less than significant GHG emissions impact. **(Less Than Significant Impact)**

4.7.4.3 Construction Greenhouse Gas Emissions

GHG emissions would occur during demolition of the existing hardscape, grading of the site, and construction of the project which would involve emissions associated with heavy equipment, vehicles, and manufacturing materials used to construct the project.

Per General Plan Policy 5.10.3-P3, the project would reduce energy consumption through sustainable construction practices such as salvaging and recycling discarded building materials (i.e., existing hardscape and remnant materials from construction) in order to reduce the amount of demolition and construction waste going to the landfill. The project site is an infill site located in an urbanized location within close distance to construction supplies and equipment. These project features would help to minimize GHG emissions generated by transport of construction materials and waste associated with the project.

Neither the City of Santa Clara nor BAAQMD have quantified thresholds for construction activities. Given that the project is in an urban setting close to construction supplies and equipment, discarded materials would be salvaged or recycled, and the project would meet Title 24 standards (*Section 4.3 Air Quality*) to reduce energy and water usage, construction of the project would not contribute substantially to local or regional GHG emissions. **(Less than Significant Impact)**

4.7.5 Conclusion

Conformance to the CAP and implementation of the green building measures would reduce operational GHG emissions to a less than significant level. **(Less Than Significant Impact)**

Construction activities would have a less than significant short-term GHG emissions impact. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on an Environmental Site Assessment (ESA) prepared for the project by *ENGEO* in October 2014. A copy of the report is attached in Appendix A of this Initial Study.

4.8.1 Existing Setting

The 7.68-acre project site is comprised of three parcels which are currently developed with a 140,440 square foot office building and two parking lots. The two parking lots were previously developed with commercial office buildings. One of the buildings was demolished in 2008, the other building was demolished in January 2015.

Based on data from nearby groundwater monitoring wells documented in the ESA, it is estimated that the direction of groundwater flow beneath the project site is northwest and the groundwater depth is a minimum of eight feet below ground surface (bgs).

4.8.1.1 Site History

A land use history of the site was compiled based on aerial photographs, topographic maps, building records, and City directories. Based on a review of these sources, as of 1899, the project site was vacant land with two roads (currently Lawrence Expressway and Kifer Road) bordering Parcel 1. By 1939, the project site was developed for agricultural uses with residences and accessory structures on-site. Roads in the current location of San Ysidro Way and Tahoe Way were constructed by 1961. Orchards and other farming uses continued on-site through 1967. By 1968, the project site began to be developed with industrial/commercial buildings.

History of Surrounding Land Uses

Similar to the project site, the surrounding area was utilized as agricultural land from 1939 to 1968. In 1968, development of office/industrial buildings appear east, west, and south (across today's Kifer Road) of the project site. Central Expressway, north of the project site, and Lawrence Expressway became paved with multiple lanes in each direction at this time. Between 1968 and 1993, development of large office/industrial complexes with extensive surface parking lots occurred in the project area. Residential uses developed further south of the project vicinity along Lawrence Expressway. Between 1993 and 2012, there were no significant changes to the project area.

4.8.1.2 Sources of Contamination

The earliest known development in the immediate project area was for agricultural land uses dating back to at least 1939. It is likely that agricultural chemicals such as pesticides (including organochlorine pesticides and pesticides containing metals), herbicides, and fertilizers, were used on-site. While the site has been developed since 1968, it is possible that residual agricultural chemicals may be present in the native soils.

The project site was part of the 60-acre National Semiconductor property (2900 Semiconductor Way) which operated as a semiconductor manufacturing facility from 1967 to 1999. As part of the 60-acre

property, the project site is listed on the US EPA's National Priorities List (NPL) database for groundwater contamination, primarily from trichloroethylene (TCE). Testing of soil and groundwater conditions identified soil and groundwater contaminated with residual volatile organic compounds (VOCs), including TCE and tetrachloroethene (PCE). The groundwater contaminant plume, which has combined with another Superfund site plume[16] off-site, extends to US 101. Table 4.8-1 outlines the history of business operations and remediation activities on the project site.

TABLE 4.8-1
History of Operations and Remediation Activities at 2900 Semiconductor Way[17]

Event	Dates
-National Semiconductor (NSC) begins manufacturing semiconductors at the 60-acre property.	1967
-Soil and groundwater contamination discovered. -Removal of 22 underground storage tanks (USTs) of solvent, acid waste sumps, and associated piping. -Excavation of 400 cubic yards of contaminated soils -Groundwater extraction and treatment.	1982-1987
-RWQCB and US EPA approved RI/FS work plan. -RWQCB issued 1991 Cleanup Requirement Orders. -NSC submits first (State-required) Five-Year Review Report to RWQCB (Sept. 1996) -RWQCB submits first Five-Year Review Report to EPA, Region 9 (Sept. 1998)	1990-1998
-Low levels of perchlorate detected at former UTC facility. -Ozone sparging/soil vapor extraction system installed. -Focused Risk Assessment Report, Potential Vapor Intrusion. -Remedial Action Plan for Building C -RWQCB submits third EPA-required Five-Year Review Report to EPA, Region 9	2000-2008
-Leak L5 Area remediation conducted. Excavation and disposal of 1,440 tons of soil and injection pipe installed. - Texas Instruments (TI) acquired the NSC site (Sept. 2011) -US EPA Region 9 issues TCE guidance -RWQCB directs additional indoor air work plans (May 2014)	2009-2014
Based on Table 3.1.1-1 in the ESA.	

Parcels 2 and 3 have been identified as containing soils contaminated with VOCs and semi-volatile organic compounds (SVOCs) from previous operations of USTs, sumps, and associated piping. A deed restriction put in place in September 2014 limits the land use of these sites to industrial, commercial, or office development. No deed restriction was listed for Parcel 1.

Numerous off-site sources of potential contamination were identified in the ESA. If, however, any of these sites had groundwater contaminates that had migrated to the project site, those contaminant levels would have already been recorded as part of the on-site testing, monitoring, and remediation activities.

[16] The source of the second groundwater contamination plume is the former United Technologies Corporation located at 1050 East Arques Avenue.
[17] Former Site Address

4.8.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	1-3
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?	☐	☐	☒	☐	1-3
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	1-3
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, will it create a significant hazard to the public or the environment?	☐	☒	☐	☐	1,2,3,10
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, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1-3
6. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1-3
7. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1-3
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	1-3

4.8.2.1 Hazardous Materials Impacts

Agricultural Land Uses

The project site was used as agricultural land for at least 29 years when the project site and adjacent properties began to redevelop. Because of the past agricultural uses on-site, it is reasonable to assume that pesticides and other agricultural chemicals were used as part of the normal agricultural operations. It is common to find arsenic, lead, and dichlorodiphenyltrichloroethane (DDT) residue in the soil in Santa Clara County from historic farming operations.

Development of the proposed project will require demolition of the existing hardscape, grading, and trenching for utilities, all of which could result in impacts to construction workers from exposure to soil contamination related to agricultural operations. Once the project is complete, the exposed soil will be capped with the building, parking garage and surface lot, and clean fill.

Impact HAZ-1: Implementation of the proposed project could expose construction workers to residual agricultural soil contamination. **(Significant Impact)**

Mitigation and Avoidance Measures

MM HAZ-1.1: After demolition but prior to the issuance of grading permits, shallow soil samples shall be taken in the native soil layers to determine if contaminated soil from previous agricultural operations is located on-site with concentrations above established construction/trench worker thresholds. The soil sampling plan must be reviewed and approved by the Santa Clara Fire Chief prior to initiation of work.

MM HAZ-1.2: Once the soil sampling analysis is complete, a report of the findings will be provided to the Santa Clara Fire Chief, Director of Planning and Inspection, and other applicable City staff for review.

MM HAZ-1.3: If contaminated soils are found in concentrations above established thresholds, a Site Management Plan (SMP) will be prepared and implemented (as outlined below) and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations. The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

An SMP will be prepared to establish management practices for handling impacted groundwater and/or soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP will include: a detailed discussion of the site background; preparation of a Health and Safety Plan by an industrial hygienist; notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction; on-site soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco

Bay Region's reuse policy; sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; soil stockpiling protocols; and protocols to manage ground-water that may be encountered during trenching and/or subsurface excavation activities. Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Environmental Health Department, the City's Director of Planning and Inspection, and the Santa Clara Fire Chief.

Implementation of the identified mitigation measures would reduce the risk of construction worker exposure to contaminated soils to a less than significant level. **(Less Than Significant Impact With Mitigation)**

Soil and Groundwater Contamination

The project site has documented soil and groundwater contamination from the previous semiconductor business on-site. While remediation activities have been on-going since 1982, deed restrictions were put in place in 2014 and a risk management plan (RMP) and SMP were developed for the site.

Any residual contamination remaining on-site after project construction is complete will be capped by the new structures and hardscape, and clean fill. While future site occupants would not be significantly impacted by residual contamination, on-site workers could be exposed during construction of the project. In addition, residual VOC contamination could result in vapor intrusion into the new office building.

Impact HAZ-2: Residual soil and groundwater contamination from the previous industrial business on-site could impact construction workers and/or result in vapor intrusion into the proposed office building. **(Significant Impact)**

Mitigation and Avoidance Measures

MM HAZ-2.1: See Mitigation Measures HAZ-1.1 through HAZ-1.3.

MM HAZ-2.2: The project application will be required to comply with all aspects of the Langan Treadwell Rollo RMP (August 2014), which includes measures for the following:

- Health and Safety Plan
- Soil Management Procedures
- Protection of Existing Remedial Systems and Monitoring Wells
- Dust Control
- Construction Stormwater Management
- Groundwater Management/Intrusion
- Unanticipated Hazardous Conditions
- Vapor Mitigation

The complete RMP is hereby incorporated by reference. A copy is provided in Appendix A.

MM HAZ-2.3: Prior to issuance of building permits, a vapor intrusion evaluation will be completed by a qualified consultant consistent with the California Department of Substances Control (DTSC) *Advisory – Active Soil Gas Investigation* (March 2010) and *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (October 2011). A report of the findings will be provided to the Santa Clara Fire Chief, Director of Planning and Inspection, and other applicable City staff for review.

If the vapor intrusion evaluations indicate an unacceptable risk to human health, a vapor mitigation system (VMS) will be required consistent with the RMP.

MM HAZ-2.4: The project will be required to comply with the 1993 Regional Water Quality Control Board Deed Restrictions for Parcels 2 and 3 (as listed on pages 19 and 20 of the ESA, Appendix A).

Groundwater as Water Supply

The project site is not supported by groundwater, and as a result, future site users would not be impacted by groundwater quality. **(Less Than Significant Impact)**

Future Operations

Operation of the proposed project would likely include the on-site use and storage of cleaning supplies and maintenance chemicals in small quantities. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and maintenance chemicals that would be used on-site would not pose a risk to on-site workers or adjacent land uses. **(Less Than Significant Impact)**

4.8.2.2 Other Hazards

The project site is not located near any public airport or private air strip. The nearest airport is the San José International Airport, located approximately three miles east of the project site. Therefore, implementation of the proposed project would not result in safety hazard impacts due to airport activities. **(No Impact)**

The project site is not within one-quarter mile of any proposed or existing school. Therefore, implementation of the proposed project would not result in a hazardous materials impact to schools in the project area. **(No Impact)**

The project site is in a highly developed urban area and it is not adjacent to any wildland areas that would be susceptible to fire. Therefore, the proposed project would not expose the proposed building and future site users to wildland fires. **(No Impact)**

The City has evaluated the proposed project design and operations and determined that the project would not interfere with any adopted emergency response plan or emergency evacuation plan. **(Less Than Significant Impact)**

4.8.3 Conclusion

With implementation of the proposed mitigations, the project would not result in significant impacts related to hazardous materials. **(Less Than Significant Impact With Mitigation)**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Setting

4.9.1.1 Flooding

The project site is not located within a 100-year flood hazard area. According to the Federal Emergency Management Agency (FEMA), the project site is located in Zone X which is an area with 0.2 percent annual chance of flood; areas with one percent chance of annual flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from one percent annual flood.[18]

4.9.1.2 Dam Failure

Based on the Santa Clara Valley Water District dam failure inundation hazard maps, the project site is likely located in the Lexington Reservoir failure inundation hazard zones but outside the Andersen Dam failure inundation hazard zone.[19] [20]

4.9.1.3 Seiches, Tsunamis, and Mudflows

There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche. There are no bodies of water near the project site that would affect the site in the event of a tsunami.[21] The project area is flat and there are no mountains near the site that would affect the site in the event of a mudflow.

4.9.1.4 Storm Drainage System

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. The lines that serve the project site drain into Calabazas Creek which flows north, carrying the effluent from the storm drains into San Francisco Bay. There is no overland release of stormwater directly into any water body from the project site.

Currently, 85 percent of the project site is covered with impervious surfaces. There is an existing 33-inch storm drain line that serves Parcel 1 and a 27-inch storm drain line that serves Parcel 2.

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[18] Federal Emergency Management Agency. Map 06085C0226H. May 18, 2009. <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1> Accessed September 9, 2015.
[19] Santa Clara Valley Water District. *Andersen Dam EAP 2009 Flood Inundation Maps. 2009*. <http://www.valleywater.org/uploadedFiles/Services/CleanReliableWater/WhereDoesYourWaterComeFrom/Reservoirs/Anderson_Dam/Anderson%20Inundation%20Maps%202009.pdf?n=6912> Accessed September 9, 2015.
[20] Santa Clara Valley Water District. *Lexington Reservoir 2009 Flood Inundation Maps. 2009.* *http://www.valleywater.org/Services/LexingtonReservoirAndLenihanDam.aspx* Accessed September 9, 2015.
[21] Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region.* <http://quake.abag.ca.gov/tsunamis>. Accessed September 9, 2015.

4.9.1.5 Groundwater

Data from previous monitoring wells on the project site estimated groundwater to be approximately eight to 12 feet bgs. The project site is developed in a confined area of the Santa Clara Valley groundwater basin and does not substantially contribute to the recharging of the groundwater aquifer used for water supply.

4.9.1.6 Water Quality

As stated above, stormwater from the project site drains into Calabazas Creek. The water quality of Calabazas Creek is directly affected by pollutants contained in stormwater runoff from a variety of urban and non-urban uses. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Based on data from the Environmental Protection Agency (EPA),[22] Calabazas Creek is currently listed on the California 303(d) list[23] for Diazinon.

Nonpoint Source Pollution Program

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

<u>Statewide Construction General Permit</u>

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide municipal stormwater permits with a regional permit for 77 Bay Area municipalities, including the City of Santa Clara. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Amendments to the MRP require all of the post-

[22] U.S. Environmental Protection Agency. *California 303(d) Listed Waters.* http://ofmpub.epa.gov/tmdl_waters10/attains_impaired_waters.impaired_waters_list?p_state=CA&p_cycle=2006 Accessed September 9, 2015.
[23] The Clean Water Act, section 303, establishes water quality standards and TMDL programs. The 303(d) list is a list of impaired water bodies.

construction runoff to be treated by using Low Impact Development (LID) treatment controls, such as biotreatment facilities. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) assists co-permittees, such as the City of Santa Clara, with implementing the provisions of the Municipal NPDES Permit.

Hydromodification

In addition to water quality controls, the Municipal Regional Stormwater NPDES permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchments areas that are greater than or equal to 65 percent impervious (per the Santa Clara Permittees Hydromodification Management Applicability Map).

Based on the SCVUPPP Watershed Map for the City of Santa Clara, the project site is within a subwatershed that drains into a hardened channel or tidal area. As a result, the project is not subject to the NPDES hydromodification peak runoff requirements.[24]

4.9.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1-3
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1-3
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐	1-3

[24] Santa Clara Valley Urban Runoff Pollution Prevention Program. http://www.scvurppp-w2k.com/hmp_maps.htm Accessed September 9, 2015.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	☐	☐	☒	☐	1-3
5. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1-3
6. Otherwise substantially degrade water quality?	☐	☐	☒	☐	1-3
7. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1,2,3,11
8. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	1,2,3,11
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐	1,2,3,12
10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1,2,3,13

4.9.2.1 Flooding Impacts

The site is not located within a 100-year flood hazard zone. Implementation of the proposed project would not result in people or structures being exposed to significant flood risks. **(No Impact)**

4.9.2.2 Water Quality

Operational Impacts

The existing and proposed square footages of pervious and impervious surfaces are shown on Table 4.9-1, below. The parcels on the project site proposed for redevelopment total approximately 142,441 square feet, of which approximately 85 percent is currently comprised of impervious surfaces. The proposed project would increase impervious surfaces on-site by approximately 1,670 square feet.

Implementation of the proposed project would result in an overall decrease in stormwater runoff due to an approximately six percent decrease in impermeable surfaces over existing conditions. Once

developed, the project site will contribute the same types of stormwater runoff pollutants as the current site conditions and as the surrounding development. Runoff from streets and parking areas often carries grease, oil, and trace amounts of heavy metals into natural drainages. Runoff from landscaping can carry pesticides, herbicides, and fertilizers. Although the amounts of these pollutants ultimately discharged into the waterways are unknown, over time they could accumulate and be substantial.

TABLE 4.9-1
Pervious and Impervious Surfaces On-Site (Parcels 1 and 2)

Site Surface	Existing/Pre-Construction (sf)	%	Project/Post-Construction (sf)	%	Difference (sf)	%
Impervious						
Building Footprint	0	0	96,116	67	+96,116	+67
Hardscape	121,425	84	26,979	19	-94,446	-65
Subtotal	*121,425*	*84*	*123,095*	*86*	*+1,670*	*+2*
Pervious Pavement and Landscaping	22,296	16	20,626	22	-1,670	-2
TOTAL	143,721	100	143,721	100		

In addition, the proposed project will add or replace more than 10,000 square feet of impervious surfaces, so it must conform to the requirements of the Municipal Regional Stormwater NPDES permit. Conformance is illustrated in the Conceptual Stormwater Control Plan and will be finalized in the final Stormwater Control Plan at the Development Permit stage of this project. Plans will be certified by engineers to ensure incorporation of appropriate and effective source control measures to meet LID requirements to prevent discharge of pollutants, reduce impervious surfaces, retain a percentage of runoff on-site for percolation, and treatment control measures to remove pollutants from runoff entering the storm drainage system. In order to meet the City's requirements and the NPDES requirements, the project proposes to drain rooftops and courtyards into bio-swales located around the property.

The proposed treatment facilities will have sufficient capacity to treat the stormwater runoff entering the storm drainage system. In addition, the project will be required to maintain all post-construction treatment control measures, as outlined below, throughout the life of the project.

The following measures, based on the RWQCB Best Management Practices (BMPs) and the City requirements, are included in the proposed project to ensure compliance with NPDES permit requirements to reduce post-construction water quality impacts.

- When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction will be filed with the RWQCB and the City of Santa Clara. The NOT will document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place as described in the SWPPP for the project site.

- All post-construction Treatment Control Measures (TCMs) will be installed, operated, and maintained by qualified personnel. On-site inlets will be cleaned out a minimum of once per year, prior to the wet season.

- The property owner/site manager will keep a maintenance and inspection schedule and record to ensure the TCMs continue to operate effectively for the life of the project. Copies of the schedule and record must be provided to the City upon request and must be made available for inspection on-site at all times.

With implementation of the project's proposed SWCP, the project will not violate any adopted water quality standards or waste discharge requirements. Runoff will be routed directly from the treatment facilities to the storm drainage system and will not flow off-site. Installation and maintenance of the proposed stormwater treatment systems will result in a less than significant impact on water quality. **(Less Than Significant Impact)**

Construction Impacts

Implementation of the proposed project will require removal of the existing pavement and grading of the site. Demolition and construction activities would temporarily increase the amount of debris on-site and grading activities could increase erosion and sedimentation that could be carried by runoff into natural waterways. Because the project will disturb more than one acre of lane, the project would be required to comply with the general stormwater permit and prepare a SWPPP for construction activities. In addition, per City requirements, the following measures (based on RWQCB recommendations) have been included in the project as a condition of project approval to reduce potential construction-related water quality impacts:

<u>Construction Measures</u>

- Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities would be suspended during periods of high winds.
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered.
- All trucks hauling soil, sand, and other loose materials would be covered and all trucks would be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers).
- Vegetation in disturbed areas would be replanted as quickly as possible.

With implementation of the identified construction measures and compliance with the NPDES General Construction Permit, construction of the proposed project would have a less than significant impact on water quality.

4.9.2.3 Storm Drainage Impacts

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. The project will result in a two percent net increase in impervious surface area on-site. The increase is minimal and, with implementation of the stormwater management plan (outlined above), redevelopment of the site would not cause any increase in stormwater runoff that would exceed the capacity of the existing storm drainage system. In addition, the Municipal Regional Stormwater NPDES permit requires that redevelopment not result in a net increase in stormwater flow exiting the project site. As a result, runoff from the project site would not exceed the capacity of the local drainage system. **(Less Than Significant Impact)**

4.9.2.4 Groundwater

The project site is currently 85 percent paved and does not contribute to recharging of the groundwater aquifers used as water supply. The depth to groundwater at the project site is at least eight feet bgs. Development of the project would include trenching for utilities and would not have any substantial excavations, and as a result, the project would not interfere with groundwater flow or expose any aquifers. **(Less Than Significant Impact)**

4.9.2.5 Inundation and Dam Failure Impacts

Due to the location of the project site, the project would not be subject to inundation by seiche, tsunami, or mudflow. **(No Impact)**

Although the project site is located within the Lexington Reservoir dam failure inundation hazard zone, the site is located over twelve miles from the Lexington Reservoir. The SCVWD maintains and inspects the dam at the reservoir and provides an annual report of the reservoir's condition. As a result, the probability of a dam failure is very low. Implementation of the project would not expose people or structures to significant flooding risks due to dam failure. **(Less Than Significant Impact)**

4.9.3 Conclusion

The project would not be subject to inundation by seiche, tsunami, or mudflow. **(No Impact)**

The project would comply with the Nonpoint Source Pollution Program and the Municipal Regional Stormwater Permit, and therefore would not violate any water quality standards or waste discharge requirements. **(Less Than Significant Impact)**

The project would not increase stormwater runoff from the site and would not degraded water quality. **(Less Than Significant Impact)**

The project does not contribute to the recharging of groundwater aquifers, and there are no groundwater recharge sources in the project area. In addition, the project would not deplete the groundwater supply or expose people or structures to flood hazards such as dam failure. **(Less Than Significant Impact)**

While construction activities could temporarily increase pollutants loads in stormwater runoff, implementation of the identified construction measures would reduce construction-related impacts to water. **(Less Than Significant Impact)**

4.10 LAND USE

4.10.1 Setting

4.10.1.1 Existing Land Uses on the Project Site

The 7.68-acre project site is located in an existing urban/industrial area of Santa Clara. The site is comprised of three parcels (APNs 205-38-015, -021, and -022) located at the northwest corner of Kifer Road and Lawrence Expressway. Parcels 1 and 2 were previously developed with commercial buildings. The building on Parcel 1 was demolished in 2008 and the building on Parcel 2 was demolished in January 2015. Both parcels are currently utilized as surface parking lots. Parcel 3 is developed with a three-story, 140,440 square foot office building and a small surface parking lot. Figure 2.2-3 shows an aerial of the project site.

4.10.1.2 Surrounding Land Uses

Development in the project area is primarily light industrial uses with some high intensity office/R&D ranging from one- to three-stories high.

North of Parcel 1 are multiple one-story office and warehouse buildings with larger surface parking lots. North of Parcel 2 is a four-level parking structure and an SVP substation. Central Expressway is located immediately north of these properties. The project is bounded on the east by Lawrence Expressway, an eight-lane roadway with a raised center median. East of Lawrence Expressway is a mix of one- to three-story office and warehouse buildings with surface parking lots. The project site is bounded to the south by Kifer Road, a four-lane roadway. South of Kifer Road is a mix of one- to three-story office and retail buildings. The Lawrence Caltrain Station is located less than 0.25 miles south of the project site. East of the project site is Semiconductor Drive, a two-lane roadway that provides access to the office and warehouse buildings to the north and east of the project site. Within the immediate project area, the land north of Central Expressway and south of Kifer Road are located within the City of Sunnyvale.

4.10.1.3 Existing Land Use Designation and Zoning

The project site is designated *Light Industrial* under the adopted General Plan and is zoned *ML – Light Industrial*. The *Light Industrial* designation is intended for a range of light industrial uses including general service, warehousing, storage, distribution, and manufacturing. Office uses, except medical facilities, are permitted up to 20 percent of the building area, and retail associated with the primary use of the site are allowed up to 10 percent of the building area. The maximum FAR allowed under this designation is 0.60.

The *ML – Light Industrial* zoning is intended to provide an optimum general industrial environment and is intended to accommodate industries operating substantially within an enclosed building (Municipal Code 18.48.020). The following uses are permitted under the *ML – Light Industrial* zoning district as described in the City's Municipal Code (Section 18.48.030):

1. Commercial storage and wholesale distribution warehouses,

2. Plants and facilities for the assembly, compounding, manufacturing, packaging, processing, repairing, or treatment of equipment, materials, merchandise, or products.
   Incidental retail sales of industrial projects or products manufactured on-site if adequate on-site customer parking is provided, display and sales occur only within a permanent building, and the industrial character of the property is maintained, and
3. Incidental and accessory buildings, storage buildings, outdoor storage, warehouses, exposed mechanical appurtenances, and the like, that comprise less than 25 percent of the total lot area and are shielded from public view.

Under the *ML* zoning designation, buildings cannot exceed 70 feet in height and the maximum building coverage is 75 percent.

4.10.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
11. Physically divide an established community?	☐	☐	☐	☒	1-3
12. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	1-3
13. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1-3

4.10.3 <u>Land Use Impacts</u>

4.10.3.1 Consistency with the General Plan Land Use Designation and Zoning

The property is currently designated *Light Industrial* in the City of Santa Clara General Plan. As stated above, the intent of this designation is to accommodate a range of light industrial uses including general service, warehousing, storage, distribution and manufacturing. This designation allows a maximum FAR of 0.6. There is no minimum FAR for this land use designation. The project site is zoned *ML – Light Industrial* which is intended to accommodate various industrial businesses. This zoning designation allows a maximum building height of 70 feet and requires one parking space per 300 square feet of gross floor area for office use.

The project proposes to demolish the existing parking lots and construct a new 177,134 square foot, five-story office building, a five-level parking garage, a surface parking lot, and site improvements. The project would result in a total FAR of 0.95.

Although the proposed project would technically exceed the maximum FAR allowable under the General Plan, the FAR was not adopted for the purpose of avoiding or mitigating an environmental effect. Moreover, an increase in intensity is supported by other provisions in the General Plan. Under Discretionary Land Use Policy 5.5.1-P5, properties within one-quarter mile of a multimodal transit stop are entitled to a ten percent increase in the maximum allowed non-residential square footage. Here, the project site is 0.25 miles from the Lawrence Caltrain Station. A higher intensity is therefore appropriate for the site. In addition, the project will promote the General Plan's strategies to ensure that the City's existing neighborhoods and community fabric are maintained as the City grows. Section 5.5 of the General Plan ("Neighborhood Compatibility") encourages new uses that are contextually appropriate, both in land use as well as in scale and design. Here, the proposed structure would be located at a major intersection and would be directly adjacent to a 140,440 square foot office building at 3689 Kifer Road. In that context, the proposed office building is appropriately located.

The maximum permitted building height in the *ML* district is 70 feet in height with a maximum lot coverage of 75 percent. The project proposes a maximum height of 87.5 feet for the new office building on Parcel 1 and 82 percent lot coverage for the parking structure on Parcel 2. The project, therefore, is not consistent with the *ML* zoning designation for the project site. The project is consistent with all other design parameters of the *ML – Light Industrial* zoning district.

The project includes an application for a modification to allow a 25 percent increase in maximum building height and lot coverage pursuant to Chapter 18.90 of the City Code. The modification would require approval by the Zoning Administrator. A 25 percent increase in building height would equate to a maximum building height of 87.5 feet, which is the height proposed.

If the modification is approved, the office building could be constructed as proposed, with a maximum height of 87.5 feet and still be consistent with the General Plan and zoning designations. If the modification is not approved, the project cannot be constructed as proposed.

Because the project would either be granted the proposed variance or the design and/or size of the project would be modified to fit within the existing zoning regulations, the proposed project would be compatible with the existing General Plan and zoning designations. **(Less Than Significant Impact)**

4.10.3.2 Land Use Compatibility

The project area is comprised of a mix of office/R&D, warehouse, and retail land uses. The proposed office development would be compatible with the surrounding land uses and would not interfere with the existing operations of the adjacent businesses. While the mass and scale of the office building would be larger than the surrounding buildings, it would not detrimentally affect the surrounding land uses. The proposed project is a compatible land use with the surrounding neighborhood. (**Less Than Significant Impact)**

4.10.3.3 Other Land Use Impacts

The project would be constructed on a developed, urban site and would not divide an established community. The project would not conflict with any habitat conservation plan or natural community conservation plan. The project is consistent with the General Plan and compatible with the adjacent and nearby office, R&D, and commercial buildings in the project vicinity. **(Less Than Significant Impact)**

4.10.4 Conclusion

The proposed project would be compatible with all adjacent and nearby land uses and is consistent with the General Plan and zoning. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Setting

The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Mt. Hamilton-Diablo Range were exposed by continued tectonic uplift and regression of the inland sea that had previously inundated this area. As a result of this process, the topography of the area is relatively flat and there are no mapped mineral resources.[25]

4.11.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	1-3
2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	1-3

4.11.2.1 Mineral Resources Impacts

The proposed project site is within a developed urban area and does not contain any known or designated mineral resources. **(No Impact)**

4.11.3 Conclusion

The project would not result in a significant impact from the loss of availability of a known mineral resource. **(No Impact)**

[25] Stanley, R. G., R. C. Jachens, P. G. Lillis, R. J. McLaughlin, K. A. Kvenvolden, F. D. Hostettler, K. A. McDougall, and L. B. Magoon. 2002. *Subsurface and petroleum geology of the southwestern Santa Clara Valley ("Silicon Valley"), California.* (Professional Paper 1663) Washington, DC: U. S. Government Printing Office.

4.12 NOISE

4.12.1 Setting

4.12.1.1 Background Information

Acceptable levels of noise vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and Federal standards have been established as guidelines for determining the compatibility of a particular land use with its noise environment.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level* or *dBA*.[26] This 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 utilized. 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. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01}, L_{10}, L_{50}, and L_{90}, are commonly used. They are the A-weighted noise levels equaled or exceeded during 1, 10, 50, and 90 percent of a stated time period.

Sound level meters can accurately measure environmental noise levels to within about plus or minus one dBA. Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Day/Night Average Sound Level, Ldn*, is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the nighttime between 10:00 PM and 7:00 AM.

The most widespread and continual source of noise in Santa Clara is transportation and transportation-related facilities. Freeways, local arterials, the Norman Y. Mineta San José International Airport, railroads, and Light Rail Transit are all major contributors to noise in Santa Clara.

4.12.1.2 Regulatory Background – Noise

The State of California and the City of Santa Clara have established guidelines, regulations, and policies designed to limit noise exposure at noise sensitive land uses. Appendix E of the State CEQA

[26] The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted, unless otherwise stated.

Guidelines, the State of California Building Code, and the City of Santa Clara's Noise Element of the General Plan present the following applicable criteria:

State CEQA Guidelines. CEQA contains guidelines to evaluate the significance of effects resulting from a proposed project. These guidelines have been used in this Initial Study as thresholds for establishing potentially significant noise impacts and are listed under Thresholds of Significance.

City of Santa Clara General Plan. Based on the City's General Plan Noise Element, Table 4.12-1 shows the noise levels considered compatible with specific land uses. Commercial land uses, including offices, are considered compatible with Ldn noise levels up to 65 dBA and acceptable with design and insulation techniques in areas with Ldn noise levels up to 75 dBA. Industrial land uses are considered compatible with Ldn noise levels up to 70 dBA and acceptable with design and insulation techniques in areas with Ldn noise levels up to 80 dBA.

TABLE 4.12-1
Noise and Land Use Compatibility (Ldn & CNEL)

Land Use	50	55	60	65	70	75	80	85
Residential								
Educational								
Recreational								
Commercial								
Industrial								
Open Space								
	Compatible							
	Require Design and insulation to reduce noise levels							
	Incompatible. Avoid land use except when entirely indoors and an interior noise level of 45 Ldn can be maintained							

Source: City of Santa Clara 2010-2035 General Plan

Santa Clara City Code. In section 9.10.040 of the Santa Clara City Code Schedule A shows the noise levels considered consistent with specific zoning designations. For office land uses, outdoor noise levels of up to 65 decibels are considered acceptable.

4.12.1.3 Existing Noise Environment

The project site is located immediately west of Lawrence Expressway and north of Kifer Boulevard in the City of Santa Clara. Noise in the project area is generated primarily from vehicular traffic along the adjacent roadways. The City of Santa Clara General Plan shows the existing noise levels at the project site are 65 to 75 dBA.[27] The site is outside the noise contour for the Norman Y. Mineta San José International Airport.

[27] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan, Section 5.10.6 Noise Goals and Policies*, Figure 5.10-4.

There are no noise sensitive land uses in proximity to the site.

4.12.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	1-3
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1-3
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1-3
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1-3
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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	1-3
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	1-3

4.12.2.1 Thresholds of Significance

The CEQA Guidelines state that a project would normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project would substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis. CEQA does not define what noise level increase would be substantial. The General Plan defines a change of three dBA L_{dn} as noticeable, five dBA L_{dn} as distinct in noise level.[28] Typically, project generated noise level increases of three dBA L_{dn} or greater are considered significant where resulting exterior noise levels would exceed the normally acceptable noise level standard. Where noise levels would remain at or below the normally acceptable noise level standard with the project, a noise level increase of five dBA L_{dn} or greater is considered significant.

[28] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan, Section 8.14.1 Noise Measurement.*

4.12.2.2 Noise Impacts to the Project Site

Based on the General Plan (5.10.6 Noise Goals and Policies), it is estimated that future office employees would be exposed to exterior noise levels up to 75 decibels. The exterior noise environment at the project site could exceed 65 dBA, which is inconsistent with the City's "normally acceptable" noise level standard for office land uses. While the exterior noise levels may exceed the City's noise standard, interior noise levels can be achieved through standard building construction techniques. Standard construction techniques can attenuate exterior noise levels from 20 to 25 decibels when windows are fixed. With fixed windows, the indoor office space would have an ambient noise level of approximately 55 dBA which is acceptable for office uses. **(Less Than Significant Impact)**

4.12.2.3 Project-Generated Traffic Noise Impacts

A noise increase is considered substantial if it increases the ambient noise level by three decibels or more in sensitive noise areas. A three decibel increase is equivalent to a doubling of traffic on local roadways. Based upon the trip generation estimates (see Section 4.16, *Transportation)*, project traffic would result in traffic noise increases, but would not double the amount of traffic on any local roadways and would not noticeably increase the ambient noise level of the project area. Future project traffic would, therefore, result in a less than significant noise impact. **(Less Than Significant Impact)**

4.12.2.4 Project-Generated Rooftop Equipment Noise Impacts

The proposed project would include various mechanical equipment such as ventilation systems, air conditioning, exhaust fans, etc. The City Code limits noise levels from building equipment to 75 dBA Leq during the daytime (7:00 am to 10:00 pm) and 50 dBA Leq during the evening (10:00 pm to 7:00 am) in the ML zoning district.

The project site is surrounded by properties zoned ML and there are no noise sensitive land uses in the project area. Therefore, noise produced by mechanical equipment during project operations would not impact any sensitive receptors near the project site. **(No Impact)**

4.12.2.5 Construction Impacts

Construction activities associated with implementation of the proposed project would temporarily increase noise levels in the project area. Construction activities generate considerable amounts of noise, especially during the construction of project infrastructure when heavy equipment is used. Typical average construction generated noise levels are about 81 – 89 decibels measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.) Construction generated noise levels drop off at a rate of about six decibels per doubling of distance between the source and receptor.

The construction of the proposed project would temporarily increase noise levels in the immediate vicinity of the project site and would be audible at the nearby businesses. Compliance with the City Code requirements for construction (listed below) would reduce impacts from construction activities on the project site.

- Construction crews will be required to use available noise suppression devices and properly maintain and muffle internal combustion engine-driven construction equipment.

- The applicant shall designate a disturbance coordinator and post the name and phone number of this person at easy reference points for the surrounding land uses. The disturbance coordinator shall respond to and address all complaints about noise in exceedance of the standards.

Compliance with the City Code requirements during construction activities on the project site would result in a less than significant construction noise impact. **(Less Than Significant Impact)**

4.12.3 Conclusion

Compliance with City Code requirements would reduce temporary construction noise impacts to a less than significant level. **(Less Than Significant Impact)**

Implementation of the proposed project would have a less than significant long-term noise impact. **(Less Than Significant Impact)**

4.13 POPULATION AND HOUSING

4.13.1 Setting

As of 2010, the City of Santa Clara had a total population of 116,468 residents with an average of 2.6 persons per household.[29] The City had approximately 57,324 employed residents[30] and 114,648 jobs.[31] By 2035, the City is projected to have 154,825 residents, 60,435 households, 154,280 total jobs and 86,800 employed residents.[32] Because the jobs/housing ratio quantifies the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City, when the ratio reaches 1.0, a balance is struck between the supply of local housing and jobs. The jobs/housing ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The current jobs/housing ratio is 2.8 jobs per resident. This is an environmental issue because proximity between jobs and housing strongly influences driving patterns, air quality, and other environmental factors.

The 2010-2035 General Plan concentrates on increased housing and the placement of housing near employment. Through the General Plan implementation, the overall jobs/employed residents ratio is expected to decrease to 1.77 by 2035. Currently, some employees within the City have to seek housing outside the community and this trend will decrease, but persist with full implementation of the General Plan.

4.13.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	1,2,3,4
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1-3
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1-3

[29] United States Census Bureau 2010. Quick Facts: *Santa Clara (City).* < http://quickfacts.census.gov> Accessed August 10, 2015.
[30] The total number of employed residents is based on the City's jobs to employed residents ratio, which is 1.9
[31] United States Census Bureau American Factfinder. *American Community Survey 5-Year Estimates 2007-2011.* <http://factfinder2.census.gov> Accessed August 10, 2015.
[32] City of Santa Clara, 2010. *City of Santa Clara 2010-2035 General Plan.*

4.13.2.1 Impacts to Population and Housing

Development of the proposed project would result in a net increase in jobs citywide. There is currently a shortage of available housing within the City of Santa Clara compared to the number of jobs within the City. The increase in jobs would incrementally increase the overall jobs/housing imbalance within the City. The project site was, however, identified for job intensification in the General Plan. The project will add approximately 351 more jobs to the site than was anticipated in the General Plan.[33] Because the additional 351 workers on-site represents less than one percent of the total jobs currently available in the City and an even smaller percentage of the total jobs planned in the General Plan, the small overage in FAR will not alter the projected jobs/housing ratio.

The project would develop land already planned for job growth in the General Plan. Implementation of the proposed project would have a less than significant impact on population and housing in Santa Clara. **(Less Than Significant Impact)**

The project site is not currently used for residential purposes; therefore, the proposed project would not displace existing housing or people or require replacement housing to be constructed. **(No Impact)**

4.13.3 Conclusion

Implementation of the proposed project would have a less than significant impact on population and housing. **(Less Than Significant Impact)**

[33] The additional FAR proposed by the project equates to 116,849 square feet of office space. For standard office projects, the City of Santa Clara estimates three workers per 1,000 square feet of office space.

4.14 PUBLIC SERVICES

4.14.1 Setting

4.14.1.1 Police Protection Services

Police protection services are provided in the project area by the City of Santa Clara Police Department (SCPD). The SCPD is divided into three divisions: Field Operations, Investigations, and Administrative Services and has approximately 145 sworn officers, 23 reserve officers, and 64 support personnel.[34] Police headquarters is located at 601 El Camino Real, approximately 3.5 miles southeast of the project site.

4.14.1.2 Fire Protection Services

Fire protection services are provided to the project site by the City of Santa Clara Fire Department (SCFD). The SCFD is comprised of approximately 179 fire service personnel and more than 65 reserve employees/volunteers. The SCFD receives an average of 7,000 emergency calls per year, including hazardous materials, emergency medical, specialized rescue, and fires. The goal of the SCFD is to maintain a force sufficiently staffed and deployed to sustain a three-minute response time to initial calls 90-95 percent of the time.[35]

The SCFD consists of 10 stations distributed throughout the City. The nearest station to the project site is Station Nine, located at 3011 Corvin Drive, which is approximately 0.5 miles southwest of the project site.

4.14.1.3 Schools

The proposed project is an office development and does not include any residential land uses that would generate school age children.

4.14.1.4 Libraries

The City is served by two libraries, the Central Park Library located at 2635 Homestead Road, and the Mission Library Family Reading Center located at 1098 Lexington Street. The Central Park Library includes group study rooms, large community rooms, public art, more than 100 public computers, high speed Internet connection for personal laptops, a computer training facility, a café and bookstore, a renowned genealogy and local history collection, a children's garden, fireplaces, and an extensive collection of materials for educational and recreational use. The Mission Library contains an extensive collection of reading materials and is headquarters for READ Santa Clara, a free adult literacy program.

[34] City of Santa Clara Website: http://scpd.org/index.aspx?page=9
[35] City of Santa Clara Website: http://fire.santaclaraca.gov/fire_div.html

4.14.1.5 Parks

The City of Santa Clara currently maintains one 52-acre community park (Central Park), 24 neighborhood parks, four mini parks, and a wildlife and natural vegetation park. Mini parks are typically less than one-acre in size and neighborhood parks range from one to fifteen acres in size.

The nearest City park is Bracher Park, located approximately 1.1 miles southeast of the project site on the east side of Bowers Avenue. This 3.5-acre park contains a large turf play area, children's play area, basketball courts, and picnic and restroom facilities.

4.14.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	☐	☐	☒	☐	1-3
Police Protection?	☐	☐	☒	☐	1-3
Schools?	☐	☐	☐	☒	1-3
Parks?	☐	☐	☐	☒	1-3
Other Public Facilities?	☐	☐	☐	☒	1-3

4.14.2.1 Impacts to Public Services

Police Protection Service

The proposed office development would increase the total population of Santa Clara during regular business hours, but would not permanently increase the population because there is no housing proposed as part of the project. The project would be constructed in conformance with current codes, and the project design would be reviewed by the City of Santa Clara Police Department to ensure that it incorporates appropriate safety features to minimize criminal activity. New facilities would not be required to provide adequate police services to serve the proposed project. **(Less Than Significant Impact)**

Fire Protection Services

The existing conditions on the site create some demand for fire services because the site is currently developed. The proposed project would result in a net increase in the total square footage of office

building space on-site, resulting in an increase in demand for fire protection services. The proposed project would be built to applicable Fire Code standards in use when construction permits are issued, including sprinklers and smoke detectors, and would include features that would reduce potential fire hazards.

Although the proposed project would incrementally increase demand for fire response and related emergency services, it would not require the development of new fire stations and, therefore, would not result in a significant physical impact on the environment. **(Less Than Significant Impact)**

School Impacts

The proposed project would construct a new office building, parking structure, surface parking lot, and site improvements, and would not include any residential uses. No new students would be directly generated by the implementation of the proposed project. Therefore, the proposed project would have no impact on school facilities or capacities in the City of Santa Clara. **(No Impact)**

Library Impacts

The proposed project would construct a new office building, parking structure, surface parking lot, and site improvements, and would not include any residential uses. Therefore, the proposed project would have no impact on library facilities in the City of Santa Clara. **(No Impact)**

Park Impacts

The proposed project would develop an office building, parking structure, surface parking lot, and site improvements, and would not include any residential uses. A net increase in the daily employee population in the City would not result in a substantial increase in usage of local recreational facilities. Although future employees might use City parks or trails for outdoor exercise, weekday employees are unlikely to place a major physical burden on existing parks. Therefore, the proposed project would not have any impact on park facilities in the City of Santa Clara. **(No Impact)**

4.14.3 Conclusion

Implementation of the proposed project would result in an increase in office space within the City that would incrementally increase the demand for police and fire protection services in the project area. This increased demand, however, would not result in the need to construct new police or fire facilities. Due to the nature of the proposed development, the project would not impact existing schools, parks, or libraries. **(Less Than Significant Impact)**

4.15 RECREATION

4.15.1 Setting

The City of Santa Clara currently maintains one community park (Central Park), 24 neighborhood parks, four mini parks, and a wildlife and natural vegetation park. Mini parks are typically less than one-acre in size, and neighborhood parks range from one to fifteen acres in size. Central Park is 52 acres and contains several of the City's recreational facilities (listed below).

In addition to parklands, the City currently has a community recreation center, three swim centers, a gymnastics center, a bicycle track, a dog park, a golf and tennis club, a senior center, a teen center, a youth activity center, and a skate park. Neighborhood parks typically range in size from one-acre to 10 acres. The City's recreational system is augmented by local school facilities, which are available to the general public after normal school hours.[36]

The nearest City park is Bracher Park, located approximately 1.1 mile southeast of the project site (as the crow flies) on the east side of Bowers Avenue. This 3.5-acre park contains a large turf play area, children's play area, basketball courts, and picnic and restroom facilities.

4.15.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒	1-3
2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	1-3

4.15.2.1 Recreational Impacts

The proposed project would develop an office building, parking structure, surface parking lot, and site improvements, and would not include any residential uses. A net increase in the daily employee population in the City would not result in a substantial increase in usage of local recreational facilities. Although future employees might use City parks and recreational centers, weekday employees are unlikely to place a major physical burden on these facilities that would hasten physical deterioration of the facilities. In addition, the project would include an outdoor seating/gathering area for employees on-site. The project would not increase the usage of existing parks and recreation

[36] City of Santa Clara, *City of Santa Clara General Plan 2010-2035*

facilities such that the construction of new or expanded recreational facilities would be required. **(No Impact)**

4.15.3 Conclusion

The proposed project would not result in significant impacts to recreational facilities in Santa Clara. **(No Impact)**

4.16 TRANSPORTATION

The following analysis is based on a transportation impact analysis completed by *Hexagon Transportation Consultants* in September, 2015. The copy of the report is provided in Appendix B.

4.16.1 Setting

4.16.1.1 Existing Roadway Network

Regional Access

Regional access to the project site is provided via U.S. Highway 101 (US 101) as described below.

US 101 is an north-south roadway that extends north to San Francisco and south to San Jose. The highway has three mixed-flow lanes and one high occupancy vehicle (HOV) lane in each direction. Regional access from US 101 is provided via its interchange with Lawrence Expressway.

Local Access

Local access to the project site is provided via Lawrence Expressway, Bowers Avenue, Wolfe Road, Kifer Road, Central Expressway, Arques Avenue, and Monroe Street. These roadways are described below.

Lawrence Expressway is a six- to eight-lane roadway that extends from Saratoga Avenue north to SR 237 where it becomes Caribbean Drive. In the vicinity of the project site, this roadway has three mixed-flow lanes and one HOV lane in each direction. Full interchanges are located at SR 237, US 101, and I-280. Lawrence Expressway provides direct access to the project site via Kifer Road.

Bowers Avenue-Great America Parkway is a north-south roadway. The roadway is referred to as Great America Parkway north of US 101 and Bowers Avenue south of US 101. Between US 101 and Kifer Road, the roadway has three lanes in each direction. At Kifer Road, it transitions to a four-lane roadway with a divided median. Further south, at Chromite Drive, Bowers Avenue is a four-lane roadway with no median. Bowers continues south to El Camino Real where it becomes Kiely Boulevard. Bowers Avenue has a full interchange at US 101 and provides access to the site via Kifer Road.

Wolfe Road is a four to six-lane, north-south arterial that begins at N. Fair Oaks Avenue and extends south into the City of Cupertino, ending at Stevens Creek Boulevard (where it becomes Miller Avenue). The roadway has a raised center median and provides access to the project site via Kifer Road.

Kifer Road is a four-lane, east-west roadway with a center two-lane left-turn lane that extends from Bowers Avenue to its terminus at N. Fair Oaks Avenue in Sunnyvale. East of Bowers Avenue the roadway because Walsh Avenue. Kifer Road provides direct access to the project site via its intersections with San Ysidro Way and Semiconductor Drive.

Central Expressway is a six-lane roadway that extends from De La Cruz Boulevard west into Palo Alto where it becomes Alma Street at San Antonio Road. Central Expressway provides access to/from the project site via Lawrence Expressway.

Arques Avenue is a two- to four-lane roadway that begins at Stowell Avenue and extends east past San Tomas Expressway and becomes Scott Boulevard. Arques Avenue connects with Central Expressway via a westbound on-ramp and an eastbound off-ramp. Arques Avenue connects with Lawrence Expressway via a traffic signal.

Reed Avenue/Monroe Street is a two- to four-lane roadway that begins west of Fair Oaks Avenue as Reed Avenue and extends southeast towards its terminus at Tisch Way in the City of San Jose. Reed Avenue is within the City of Sunnyvale and transitions to Monroe Street in the City of Santa Clara at its intersection with Lawrence Expressway (Sunnyvale-Santa Clara city boundary). Reed Avenue/Monroe Street has a center two-way left-turn lane that runs along the entirety of the roadway.

4.16.1.2 Existing Pedestrian and Bicycle Facilities

Pedestrian Facilities

Pedestrian facilities in the vicinity of the project site consist of sidewalks along one or both sides of the streets, with the exception of Central Expressway, and intermittent segments along Kifer Road. There is no sidewalk provided along the project's frontage on Kifer Road between Lawrence Expressway and San Ysidro Way. Pedestrian crosswalks and signal heads are present at all signalized intersections, including at the intersections of Kifer Road with Lawrence Expressway, Semiconductor Drive, and Wolfe Road. A sidewalk is provided along the west side of San Zino Way, which provides direct access to the Lawrence Caltrain Station from the project site.

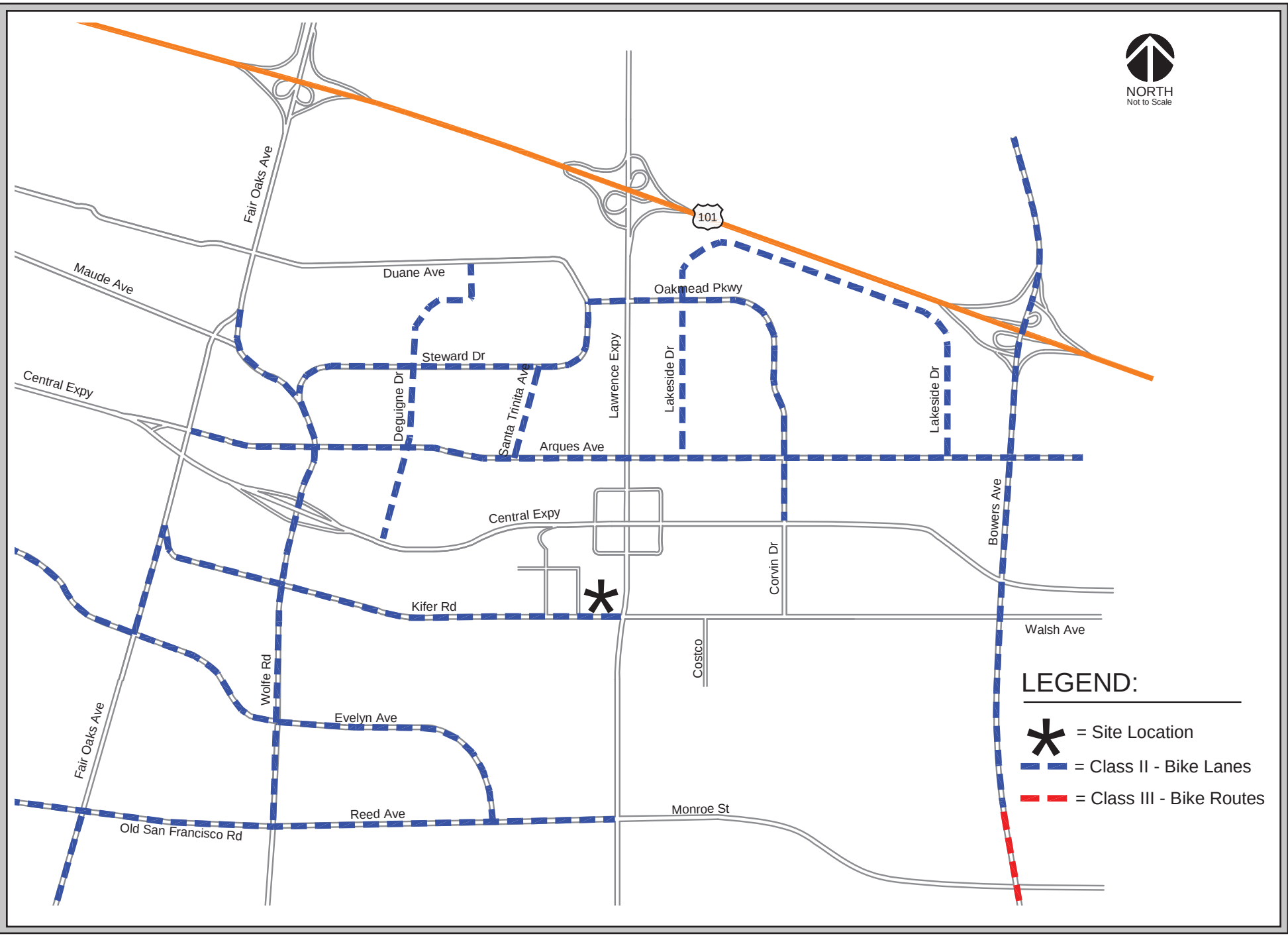
The existing sidewalks in the project area have adequate connectivity and provide pedestrians with safe routes to all surrounding land uses in the area.

Bicycle Facilities

Bicycle facilities are comprised of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designed for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. Currently, Class II facilities in the project area include bike lanes on Bowers Avenue, Scott Boulevard, Oakmead Parkway, Kifer Road, Reed Avenue, Evelyn Avenue, and Wolfe Road. Bicycles are also permitted on Lawrence and Central Expressways. Existing bicycle facilities are shown on Figure 4.16-1.

4.16.1.3 Existing Transit Service

Existing transit service in the project area is provided by the Santa Clara Valley Transportation Authority (VTA), Caltrain, and the Altamont Commuter Express (ACE). The nearest Caltrain station is the Lawrence Station located south of Kifer Road on Lawrence Expressway, approximately one-quarter mile south of the project site. The nearest ACE station is the Great America Station located



EXISTING BICYCLE FACILITIES

FIGURE 4.16-1

near the intersection of Tasman Drive and Lafayette Street. Shuttle service is provided between this station and key employment centers.

ACE Gray Shuttle (822) provides service between the Great America ACE Station and the project area. The Gray Shuttle runs on Arques Avenue, Wolfe Road, and Kifer Road. The shuttle has scheduled stops along Kifer Road within a one-quarter mile from the project site.

VTA bus services are described in Table 4.16-1 below. All transit services are shown on Figure 4.16-2.

TABLE 4.16-1
VTA Bus Service in the Project Area

Route	Route Description	Headway (min)
26	Lockheed Martin Transit Center to Eastridge Transit Center.	30
32	San Antonio Shopping Center to Santa Clara Transit Center	30
57	West Valley College to Great America	30
58	West Valley College to Alviso	30
Limited 304	South San Jose to Sunnyvale Transit Center	30 – AM Peak 40 – PM Peak
Limited 328	South San Jose to Lockheed Martin Transit Center	NB – 2 runs from 6:00am to 7:20am SB – 2 runs from 4:50pm to 6:00pm

4.16.1.4 Existing Intersection Operations

Methodology

The impacts of the proposed development were evaluated following the methodologies established by the City of Santa Clara and the Santa Clara County Congestion Management Program (CMP). Intersections were selected for study if project traffic would add at least 10 trips per lane per hour during one or more peak hours, consistent with adopted CMP methodology.

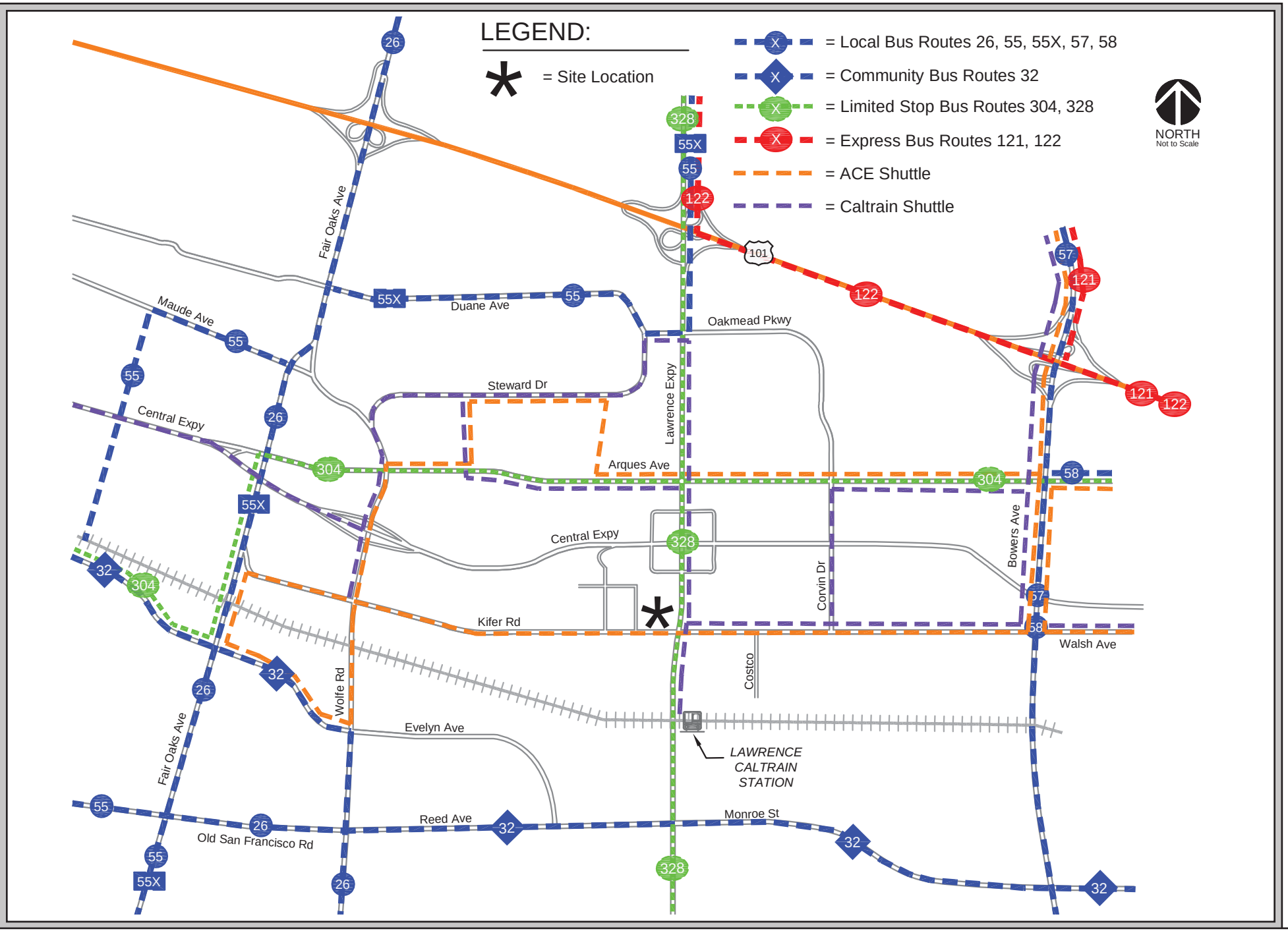
Traffic conditions were evaluated for the following scenarios to determine if the level of service (LOS) of the local intersections in the project area would be adversely affected by the project generated traffic:

Scenario 1: Existing – Existing traffic conditions.

Scenario 2: Background – Scenario 1 plus approved but not yet constructed development.

Scenario 3: Existing Plus Project – Scenario 1 plus traffic generated by the project.

Scenario 4: Background Plus Project – Scenario 2 plus traffic generated by the project.



EXISTING TRANSIT SERVICES

FIGURE 4.16-2

LOS is a qualitative description of operating conditions ranging from LOS A, or free-flowing conditions with little or no delay, to LOS F, or congested conditions with excessive delays. The correlation between average delay and LOS for signalized intersections is shown in Table 4.16-2.

TABLE 4.16-2
Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Control Delay per Vehicle[37]
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C[38] ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Existing LOS of Study Intersections

The traffic study analyzed AM and PM Peak Hour traffic conditions for 15 signalized intersections in the vicinity of the project site. All study intersections are listed in Table 4.16-3 below and the locations of the study intersections are shown on Figure 4.16-3. The study intersections are located within Santa Clara and Sunnyvale.

Based on the City of Santa Clara's policies, an acceptable operating level of service is defined as LOS D or better at all intersections. For County of Santa Clara and CMP intersections, an acceptable level of service is LOS E. In Sunnyvale, an acceptable operating level of service is LOS D except for City intersections that are designated regionally significant. For regionally significant intersections, the acceptable level of service is LOS E.

Analysis of the existing intersection operations found that two of the study intersections currently operate at an unacceptable LOS. The two intersections are listed below and shown in bold in the table.

- No. 6 – Lawrence Expressway and Reed Avenue-Monroe Street *(AM Peak Hour)*
- No. 7 – Lawrence Expressway and Kifer Road *(AM and PM Peak Hour)*

[37] Measured in seconds.
[38] Volume to capacity ratio.

STUDY INTERSECTIONS

FIGURE 4.16-3

The results of the existing conditions analysis are summarized in Table 4.16-3.

TABLE 4.16-3
Study Intersections Level of Service – Existing Conditions

No.	Intersection	Peak Hour	Delay	LOS
1	Bowers Avenue and Central Expressway (CMP)	AM PM	58.0 59.9	E E
2	Bowers Avenue and Kifer Road-Walsh Avenue (SC)	AM PM	26.5 28.2	C C
3	Oakmead Parkway-Corvin Drive and Central Expressway (CMP)	AM PM	46.1 51.0	D D
4	Corvin Drive and Kifer Road (SC)	AM PM	8.0 9.4	A A
5	Kifer Road and Costco Driveway (SV)	AM PM	17.7 20.1	B C
6	Lawrence Expressway and Reed Avenue/Monroe Street (CMP)	AM PM	**203.1** 63.7	**F** E
7	Lawrence Expressway and Kifer Road (SV)	AM PM	**168.2** **81.0**	**F** **F**
8	Lawrence Expressway and Arques Avenue (CMP)	AM PM	66.6 69.6	E E
9	Lawrence Expressway and Duane Avenue-Oakmead Parkway (SV)	AM PM	45.1 56.2	D E
10	Lawrence Expressway and US 101 (South) (SV)	AM PM	15.1 43.1	B D
11	Lawrence Expressway and US 101 (North) (SV)	AM PM	21.7 24.4	C C
12	Kifer Road and Semiconductor Drive (SV)	AM PM	10.3 19.96	B B
13	Wolfe Road and Kifer Road (SV)	AM PM	26.5 33.7	C C
14	Wolfe Road and Evelyn Avenue (SV)	AM PM	32.4 29.9	C C
15	Wolfe Road and Reed Avenue-Old San Francisco Road (SV)	AM PM	34.1 32.9	C C

Notes: (CMP) VTA Congestion Management Program, (SC) City of Santa Clara, (SV) City of Sunnyvale

4.16.1.5 Existing Freeway Operations

Methodology

As with intersection LOS, the level of service for freeways is a qualitative description of operating conditions ranging from LOS A, or free-flowing conditions with little or no delay, to LOS F, or congested conditions with excessive delays. The LOS for freeway segments is based on the density of traffic flow with density being the number of passenger cars per mile per lane. The correlation between average delay and LOS for freeway segments is shown in Table 4.16-4.

TABLE 4.16-4 Freeway Mainline Level of Service Criteria		
Level of Service	**Density (passenger cars per mile per lane)**	**Speed (miles/hour)**
A	≤ 11.0	67.0 ≤
B	11.1 to 18.0	66.5 to 66.9
C	18.1 to 26.0	66.0 to 66.4
D	26.1 to 46.0	46.0 to 65.9
E	46.1 to 58.0	35.0 to 45.9
F	> 58.0	< 35.0

LOS for key freeway segments in the AM and PM peak hours was calculated based on the traffic volumes obtained from VTA's *2014 Monitoring and Conformance Report*. Freeways are CMP-monitored facilities and, as a result, the minimal acceptable level of service is LOS E.

Existing LOS of Study Freeway Segments

Analysis of the existing freeway operations concluded that the mixed flow lanes of 17 freeway segments and the HOV lanes of 12 freeway segments currently operate at LOS F in at least one direction during at least one of the peak hours of traffic. These freeway segments are listed below.

- Northbound US 101 – nine mixed-flow segments between I-880 and North Matilda Avenue (AM Peak Hour)
- Northbound US 101 – four HOV segments between I-880 and De La Cruz Boulevard and the segment of Bowers Avenue/Great America Parkway to Lawrence Expressway (AM Peak Hour)
- Southbound US 101 – eight mixed-flow segments between Fair Oaks Avenue and I-880 (PM Peak Hour)
- Southbound US 101 – four HOV segments between North Fair Oaks Avenue and De La Crua Boulevard and three HOV segments between Guadalupe Parkway and I-880 (PM Peak Hour)

All other study freeway segments operate at an acceptable LOS under existing conditions. The results of the analysis are summarized in Table 4.16-5 below.

TABLE 4.16-5 Study Freeway Segments Level of Service – Existing Conditions					
Freeway	**Segment**	**Direction**	**Peak Hour**	**LOS**	
				Mixed	**HOV**
US 101	I-880 to Old Bayshore Highway	NB	AM	**F**	**F**
			PM	B	A
		SB	AM	B	A
			PM	**F**	**F**
US 101	Old Bayshore Highway to North First Street	NB	AM	**F**	**F**
			PM	C	A
		SB	AM	B	A
			PM	**F**	**F**

TABLE 4.16-5 Study Freeway Segments Level of Service – Existing Conditions					
Freeway	**Segment**	**Direction**	**Peak Hour**	**LOS**	
				Mixed	**HOV**
US 101	North First Street to Guadalupe Parkway	NB	AM	**F**	**F**
			PM	B	A
		SB	AM	B	A
			PM	**F**	**F**
US 101	Guadalupe Parkway to De La Cruz Boulevard	NB	AM	**F**	**F**
			PM	C	A
		SB	AM	D	A
			PM	**F**	E
US 101	De La Cruz Boulevard to Montague Expressway/San Tomas Expressway	NB	AM	**F**	E
			PM	D	B
		SB	AM	D	B
			PM	**F**	**F**
US 101	Montague Expressway/San Tomas Expressway to Bowers Avenue/Great America Parkway	NB	AM	**F**	E
			PM	D	C
		SB	AM	C	B
			PM	**F**	**F**
US 101	Bowers Avenue/Great America Parkway to Lawrence Expressway	NB	AM	**F**	**F**
			PM	D	B
		SB	AM	E	B
			PM	**F**	**F**
US 101	Lawrence Expressway to North Fair Oaks Avenue	NB	AM	**F**	E
			PM	D	B
		SB	AM	D	B
			PM	**F**	**F**
US 101	North Fair Oaks Avenue to North Matilda Avenue	NB	AM	**F**	D
			PM	D	C
		SB	AM	D	B
			PM	D	D
US 101	North Matilda Avenue to SR 237	NB	AM	D	D
			PM	C	D
		SB	AM	C	C
			PM	D	D

4.16.1.6 Background Intersection Operations

Background traffic conditions represent conditions anticipated to exist after completion of the environmental review process but prior to completion of the proposed development. It takes into account planned transportation system improvements that will occur prior to implementation of the modified project and background traffic volumes. Background peak-hour traffic volumes are calculated by adding estimated traffic from approved but not yet constructed development to the existing conditions. This

traffic scenario represents a more congested traffic condition than the existing conditions scenario since it includes traffic from approved projects.

This analysis assumes that the transportation network under background conditions would be the same as the existing transportation network.

Background Intersection Level of Service

Analysis of the background intersection operations found that five intersections will operate at an unacceptable LOS under background conditions. These intersections are listed below.

- No. 1 – Bowers Avenue and Central Expressway *(AM & PM Peak Hour)*
- No. 6 – Lawrence Expressway and Reed Avenue-Monroe Street *(AM & PM Peak Hour)*
- No. 7 – Lawrence Expressway and Kifer Road *(AM & PM Peak Hour)*
- No. 8 – Lawrence Expressway and Arques Avenue *(AM & PM Peak Hour)*
- No. 9 – Lawrence Expressway and Duane Avenue-Oakmead Parkway *(PM Peak Hour)*

This change in LOS from existing to background traffic volumes reflects that the environment in which the project will eventually occur is dynamic and affected by new development independent of the project. All other study intersections would operate at an acceptable LOS under background conditions in both the AM and PM Peak Hours. The results of the analysis under background conditions are summarized in Table 4.16-6 below.

TABLE 4.16-6
Study Intersections Level of Service – Background Conditions

No.	Intersection	Peak Hour	Existing		Background	
			Delay	LOS	Delay	LOS
1	Bowers Avenue and Central Expressway (CMP)	AM	58.0	E	**88.8**	**F**
		PM	59.9	E	**131.3**	**F**
2	Bowers Avenue and Kifer Road-Walsh Avenue (SC)	AM	26.5	C	28.5	C
		PM	28.2	C	34.6	C
3	Oakmead Parkway-Corvin Drive and Central Expressway (CMP)	AM	46.1	D	61.6	E
		PM	51.0	D	73.7	E
4	Corvin Drive and Kifer Road (SC)	AM	8.0	A	7.9	A
		PM	9.4	A	8.8	A
5	Kifer Road and Costco Driveway (SV)	AM	17.7	B	17.8	B
		PM	20.1	C	19.3	B
6	Lawrence Expressway and Reed Avenue/Monroe Street (CMP)	AM	**203.1**	**F**	**190.9**	**F**
		PM	63.7	E	**110.3**	**F**
7	Lawrence Expressway and Kifer Road (SV)	AM	**168.2**	**F**	**248.8**	**F**
		PM	**81.0**	**F**	**132.4**	**F**
8	Lawrence Expressway and Arques Avenue (CMP)	AM	66.6	E	**105.5**	**F**
		PM	69.6	E	**107.5**	**F**
9	Lawrence Expressway and Duane Avenue-Oakmead Parkway (SV)	AM	45.1	D	50.2	D
		PM	56.2	E	**90.3**	**F**
10	Lawrence Expressway and US 101 (South) (SV)	AM	15.1	B	26.5	C
		PM	43.1	D	50.5	D

TABLE 4.16-6 Study Intersections Level of Service – Background Conditions						
No.	**Intersection**	**Peak Hour**	**Existing**		**Background**	
			Delay	LOS	Delay	LOS
11	Lawrence Expressway and US 101 (North) (SV)	AM PM	21.7 24.4	C C	20.0 24.4	B C
12	Kifer Road and Semiconductor Drive (SV)	AM PM	10.3 19.96	B B	11.0 20.2	B C
13	Wolfe Road and Kifer Road (SV)	AM PM	26.5 33.7	C C	25.7 34.0	C C
14	Wolfe Road and Evelyn Avenue (SV)	AM PM	32.4 29.9	C C	32.2 30.0	C C
15	Wolfe Road and Reed Avenue-Old San Francisco Road (SV)	AM PM	34.1 32.9	C C	35.1 35.9	D D

4.16.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	1,2,3,15
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐	1,2,3,15
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐	1,2,3,15
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐	1,2,3,15
5. Result in inadequate emergency access?	☐	☐	☒	☐	1,2,3,15

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐	1,2,3,15

4.16.2.1 Impact Criteria

City of Santa Clara – Local Signalized Intersections

Based on City of Santa Clara criteria, a project would cause a significant impact at a signalized intersection if the additional project traffic caused one of the following:

- cause the level of service at any local intersection to degrade from an acceptable LOS D or better under exiting or background conditions to an unacceptable LOS E or F under existing plus project or background plus project conditions; or
- at any local intersection that is already an unacceptable LOS E or F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

City of Sunnyvale – Local Signalized Intersections

City of Sunnyvale's impact criteria is equivalent to City of Santa Clara criteria.

CMP and Santa Clara County Expressway Intersections

Based on CMP criteria, a project would cause a significant impact at a CMP or County Expressway intersection if the additional project traffic caused one of the following:

- cause the level of service at any CMP/County intersection to degrade from an acceptable LOS E or better under exiting or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- at any CMP/County intersection that is already an unacceptable LOS F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

CMP – Freeway Segments

Based on CMP criteria, a project would cause a significant impact to a freeway segment if the additional project traffic caused one of the following:

- cause the level of service on any freeway segment to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- add more than one percent of the existing freeway capacity to any freeway segment operating at LOS F under existing or background conditions.

4.16.2.2 Trip Generation Estimates

Traffic trips generated by the project were estimated using the "General Office" rates[39] in the Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition.* Vehicle trip reductions, based on VTA guidelines, were applied to the total project trips to account for the project's proximity to transit and the project's proposed TDM program. A summary of the project trip generation estimates is shown in Table 4.16-7, below.

TABLE 4.16-7
Project Trip Generation Estimates

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project – General Office	1,930	240	33	273	44	217	261
TDM Reduction (5 %)	-97	-12	-2	-14	-2	-11	-13
Caltrain Reduction (6%)	-116	-14	-2	-16	-3	-13	-16
Existing Land Use – R&D Center[40]	-244	-30	-7	-37	-5	-27	-32
Net Project Trips	**1,473**	**184**	**22**	**206**	**34**	**166**	**200**

4.16.2.3 Existing Plus Project Intersection Operations

The LOS of the study intersections was calculated under project conditions by adding the project trips from the total proposed development to the existing conditions. Analysis of the existing plus project intersection operations concluded that the following intersections will operate at an unacceptable LOS during the Peak Hours:

- No. 6 – Lawrence Expressway and Reed Avenue-Monroe Street *(AM Peak Hour)*
- No. 7 – Lawrence Expressway and Kifer Road *(AM and PM Peak Hour)*

All other study intersections would operate at an acceptable LOS. The results of the existing plus project conditions analysis are summarized in Table 4.16-8 below.

[39] ITE Land Use 710
[40] Refers to building demolished in January 2015. Due to the recent demolition of the building, the City has given credit for the traffic trips associated with that building.

TABLE 4.16-8 Study Intersections Level of Service – Existing Plus Project Conditions						
No.	**Intersection**	**Peak Hour**	**Existing**		**Existing Plus Project**	
			Delay	LOS	Delay	LOS
1	Bowers Avenue and Central Expressway (CMP)	AM PM	58.0 59.9	E E	58.2 60.1	E E
2	Bowers Avenue and Kifer Road-Walsh Avenue (SC)	AM PM	26.5 28.2	C C	26.6 28.3	C C
3	Oakmead Parkway-Corvin Drive and Central Expressway (CMP)	AM PM	46.1 51.0	D D	46.9 51.4	D D
4	Corvin Drive and Kifer Road (SC)	AM PM	8.0 9.4	A A	8.0 9.4	A A
5	Kifer Road and Costco Driveway (SV)	AM PM	17.7 20.1	B C	17.7 20.1	B C
6	Lawrence Expressway and Reed Avenue/Monroe Street (CMP)	AM PM	**203.1** 63.7	**F** E	**204.6** 64.3	**F** E
7	Lawrence Expressway and Kifer Road (SV)	AM PM	**168.2** **81.0**	**F** **F**	**171.2** **83.3**	**F** **F**
8	Lawrence Expressway and Arques Avenue (CMP)	AM PM	66.6 69.6	E E	66.7 69.4	E E
9	Lawrence Expressway and Duane Avenue-Oakmead Parkway (SV)	AM PM	45.1 56.2	D E	45.0 56.6	D E
10	Lawrence Expressway and US 101 (South) (SV)	AM PM	15.1 43.1	B D	18.8 43.7	B D
11	Lawrence Expressway and US 101 (North) (SV)	AM PM	21.7 24.4	C C	22.2 24.5	C C
12	Kifer Road and Semiconductor Drive (SV)	AM PM	10.3 19.96	B B	10.8 20.2	B C
13	Wolfe Road and Kifer Road (SV)	AM PM	26.5 33.7	C C	26.9 34.5	C C
14	Wolfe Road and Evelyn Avenue (SV)	AM PM	32.4 29.9	C C	32.6 29.9	C C
15	Wolfe Road and Reed Avenue-Old San Francisco Road (SV)	AM PM	34.1 32.9	C C	34.3 33.1	C C

While two intersections will continue to operate at an unacceptable LOS under existing plus project conditions, the project will not cause the level of service at any local intersection to degrade to an unacceptable LOS or cause the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more. As a result, implementation of the proposed project would have a less than significant LOS impact. **(Less Than Significant Impact)**

4.16.2.4 Background Plus Project Intersection Operations

The LOS of the study intersections was calculated under background plus project conditions by adding the new project trips from the proposed development to the background conditions. Analysis of the background plus project intersection operations concluded that five signalized intersections would operate at an unacceptable LOS in one or both Peak Hours. These five intersections are listed below.

- No. 1 – Bowers Avenue and Central Expressway *(AM & PM Peak Hour)*
- No. 6 – Lawrence Expressway and Reed Avenue-Monroe Street *(AM & PM Peak Hour)*
- No. 7 – Lawrence Expressway and Kifer Road *(AM & PM Peak Hour)*
- No. 8 – Lawrence Expressway and Arques Avenue *(AM & PM Peak Hour)*
- No. 9 – Lawrence Expressway and Duane Avenue-Oakmead Parkway *(PM Peak Hour)*

All other study intersections would operate at an acceptable LOS. The results of the background plus project conditions analysis are summarized in Table 4.16-9 below.

TABLE 4.16-9
Study Intersections Level of Service – Background Plus Project Conditions

No.	Intersection	Peak Hour	Background		Background Plus Project			
			Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C
1	Bowers Avenue and Central Expressway (CMP)	AM	**88.8**	**F**	**88.9**	**F**	0.1	0.003
		PM	**131.3**	**F**	**131.3**	**F**	0.1	0.002
2	Bowers Avenue and Kifer Road-Walsh Avenue (SC)	AM	28.5	C	28.7	C	0.2	0.003
		PM	34.6	C	34.8	C	0.3	0.003
3	Oakmead Parkway-Corvin Drive and Central Expressway (CMP)	AM	61.6	E	62.6	E	1.9	0.006
		PM	73.7	E	74.2	E	0.9	0.003
4	Corvin Drive and Kifer Road (SC)	AM	7.9	A	7.9	A	0.0	0.006
		PM	8.8	A	8.8	A	0.0	0.004
5	Kifer Road and Costco Driveway (SV)	AM	17.8	B	17.9	B	0.0	0.001
		PM	19.3	B	19.3	B	0.0	0.001
6	Lawrence Expressway and Reed Avenue/Monroe Street (CMP)	AM	**190.9**	**F**	**193.4**	**F**	3.2	0.006
		PM	**110.3**	**F**	**111.3**	**F**	1.7	0.003
7	Lawrence Expressway and Kifer Road (SV)	AM	**248.8**	**F**	**249.8**	**F**	**-1.1**	**0.008**
		PM	**132.4**	**F**	**136.5**	**F**	**6.3**	**0.017**
8	Lawrence Expressway and Arques Avenue (CMP)	AM	**105.5**	**F**	**105.5**	**F**	1.0	0.002
		PM	**107.5**	**F**	**107.7**	**F**	1.2	0.002
9	Lawrence Expressway and Duane Avenue-Oakmead Parkway (SV)	AM	50.2	D	50.3	D	0.3	0.002
		PM	**90.3**	**F**	**91.0**	**F**	1.8	0.002
10	Lawrence Expressway and US 101 (South) (SV)	AM	26.5	C	31.3	C	7.3	0.013
		PM	50.5	D	51.0	D	0.6	0.009
11	Lawrence Expressway and US 101 (North) (SV)	AM	20.0	B	20.4	C	0.6	0.008
		PM	24.4	C	24.5	C	0.1	0.002
12	Kifer Road and Semiconductor Drive (SV)	AM	11.0	B	11.4	B	0.6	0.025
		PM	20.2	C	20.5	C	0.3	0.035
13	Wolfe Road and Kifer Road (SV)	AM	25.7	C	26.2	C	0.7	0.009
		PM	34.0	C	34.6	C	0.8	0.008
14	Wolfe Road and Evelyn Avenue (SV)	AM	32.2	C	32.4	C	0.3	0.005
		PM	30.0	C	30.0	C	0.0	0.002
15	Wolfe Road and Reed Avenue-Old San Francisco Road (SV)	AM	35.1	D	35.2	D	0.2	0.005
		PM	35.9	D	36.1	D	0.1	0.003

Implementation of the proposed project will cause the critical-movement delay at the Lawrence Expressway/Kifer Road intersection to increase by 6.3 seconds and the V/C to increase by 0.017 in the PM Peak Hour. As a result, implementation of the proposed project would have a significant LOS impact.

Impact TRAN-1: Implementation of the proposed project would result in a significant impact to the Lawrence Expressway/Kifer Road intersection in the PM Peak Hour. **(Significant Impact)**

Mitigation and Avoidance Measures

Project Specific Mitigation Measures

The following mitigation measure will be implemented by the project to reduce the identified traffic impact to a less than significant level:

MM TRAN-1.1: The impact at this intersection could be mitigated with the grade separation of Lawrence Expressway between I-280 and US 101, as identified in the Comprehensive County Expressway Planning Study. Therefore, the project will pay a fair-share contribution towards the identified improvements.

4.16.2.5 Existing Plus Project Freeway Segment Operations

Freeway segments were analyzed during AM and PM Peak Hours to calculate the amount of project traffic projected to be added to the nearby freeways. Project trips were assigned to the HOV lanes in proportion to existing HOV use.

Analysis of the existing plus project freeway operations concluded that 17 mixed flow lane and nine HOV lane freeway segments previously identified as operating at LOS F in at least one direction during at least one of the peak hours of traffic under existing conditions would continue to operate at LOS F under existing plus project conditions. The impacted segments are listed below.

- Northbound US 101 – nine mixed-flow segments between I-880 and North Matilda Avenue (AM Peak Hour)
- Northbound US 101 – four HOV segments between I-880 and De La Cruz Boulevard and the segment of Bowers Avenue/Great America Parkway to Lawrence Expressway (AM Peak Hour)
- Southbound US 101 – eight mixed-flow segments between Fair Oaks Avenue and I-880 (PM Peak Hour)
- Southbound US 101 – four HOV segments between North Fair Oaks Avenue and De La Cruz Boulevard and three HOV segments between Guadalupe Parkway and I-880 (PM Peak Hour)

All other study freeway segments would continue to operate at an acceptable LOS under existing plus project conditions. The results of the analysis are summarized in Table 4.16-10 below.

TABLE 4.16-10 Study Freeway Segments Level of Service – Existing Plus Project Conditions						
US 101 Segment	**Direction**	**Peak Hour**	**LOS**		**Percent of Capacity**	
			Mixed	**HOV**	**Mixed**	**HOV**
I-880 to Old Bayshore Highway	NB	AM	**F**	**F**	0.39	0.61
		PM	B	A	0.09	0.06
	SB	AM	B	A	0.04	0.06
		PM	**F**	**F**	0.28	0.85
Old Bayshore Highway to North First Street	NB	AM	**F**	**F**	0.39	0.61
		PM	C	A	0.09	0.06
	SB	AM	B	A	0.06	0.00
		PM	**F**	**F**	0.29	0.79
North First Street to Guadalupe Parkway	NB	AM	**F**	**F**	0.41	0.55
		PM	B	A	0.09	0.06
	SB	AM	B	A	0.04	0.06
		PM	**F**	**F**	0.32	0.67
Guadalupe Parkway to De La Cruz Boulevard	NB	AM	**F**	**F**	0.39	0.61
		PM	C	A	0.09	0.06
	SB	AM	D	A	0.06	0.00
		PM	**F**	E	0.32	0.67
De La Cruz Boulevard to Montague Expressway/San Tomas Expressway	NB	AM	**F**	E	0.39	0.61
		PM	D	B	0.09	0.06
	SB	AM	D	B	0.04	0.06
		PM	**F**	**F**	0.29	0.79
Montague Expressway/San Tomas Expressway to Bowers Avenue/Great America Parkway	NB	AM	**F**	E	0.38	0.67
		PM	D	C	0.07	0.12
	SB	AM	C	B	0.04	0.06
		PM	**F**	**F**	0.33	0.61
Bowers Avenue/Great America Parkway to Lawrence Expressway	NB	AM	**F**	**F**	0.38	0.67
		PM	D	B	0.09	0.06
	SB	AM	E	B	0.04	0.06
		PM	**F**	**F**	0.33	0.61
Lawrence Expressway to North Fair Oaks Avenue	NB	AM	**F**	E	0.04	0.06
		PM	D	B	0.41	0.30
	SB	AM	D	B	0.46	0.30
		PM	**F**	**F**	0.07	0.12
North Fair Oaks Avenue to North Matilda Avenue	NB	AM	**F**	D	0.04	0.06
		PM	D	C	0.36	0.48
	SB	AM	D	B	0.46	0.30
		PM	D	D	0.07	0.12
North Matilda Avenue to SR 237	NB	AM	D	D	0.04	0.06
		PM	C	D	0.33	0.61
	SB	AM	C	C	0.41	0.55
		PM	D	D	0.07	0.12

Implementation of the proposed project would not add more than one percent of vehicle traffic to any freeway segment and, therefore, would have a less than significant impact. **(Less Than Significant Impact)**

4.16.2.5 Pedestrian/Bicycle Facilities and Transit Operations

Pedestrian and Bicycle Facilities

The proposed project will generate new demand for pedestrian and bicycle facilities in the immediate project area. There are sidewalks and signalized crosswalks throughout the project area that provide access to nearby transit. Two new crosswalks are proposed by the project on Tahoe Way, just west of San Ysidro Way, and on San Ysidro Way, 60 feet north of Kifer Road to provide access to the new parking structure. The proposed crosswalk on San Ysidro Way is too close to the Kifer Road intersection and would result in a pedestrian safety impact due to inadequate sight distance for vehicles making the uncontrolled right turn from Kifer Road. It is also likely the outbound traffic queues on San Ysidro Way could extend from Kifer Road and block the crosswalk in the PM Peak Hour. The proposed crosswalk on Tahoe Way was similarly found to be too close to the uncontrolled left turn from San Ysidro Way to Tahoe Way.

As a condition of project approval, the City will require the project applicant to modify the project design to relocate the San Ysidro Way crosswalk to the intersection of San Ysidro Way and Kifer Road. In addition, the Tahoe Way crosswalk will be relocated centrally between the two garage access driveways.

The project will also be required, as a condition of project approval, to widen Kifer Road from Lawrence Expressway to San Ysidro Way. The road will be widened by six feet (with the right of way coming from the project site) to allow for installation of a six-foot wide Class II bicycle lane. The road widening will require the existing five-foot sidewalk to be removed along the project site's street frontage. A new five-foot wide sidewalk will be installed along the project frontage. In addition, all project site frontages on Lawrence Expressway, Tahoe Way, and San Ysidro Way will be improved, where necessary, to provide a minimum five-foot wide sidewalk.

With implementation of the conditions of project approval, the project will not result in unsafe conditions for pedestrians. **(Less Than Significant Impact)**

Bicycle lanes are provided on Bowers Avenue, Scott Boulevard, Oakmead Parkway, Kifer Road, Reed Avenue, Evelyn Avenue, and Wolfe Road. Bicycles are also permitted on Lawrence and Central Expressways. In addition to the existing bicycle facilities, the project proposes secure bicycle parking (25 Class I bicycle lockers and eight Class II bicycle rack spaces) and showers to promote bicycle use.[41] It is estimated the bicycle trips would account for no more than one percent of total traffic trips, which equates to approximately three new bicycle trips per Peak Hour. The project does not propose to alter existing bicycle facilities and would not conflict with existing or planned bicycle facilities. The increase in bicycle usage on the identified facilities would not exceed the capacity of those facilitates. Therefore, the project will not result in unsafe conditions for bicyclists. **(Less Than Significant Impact)**

[41] This is in addition to the 18 Class I spaces and six Class II spaces already provided in the existing office building.

Transit Operations

The project site is currently served by fixed route bus services provided by the VTA and heavy rail service at the Lawrence Caltrain Station (approximately one-quarter mile south of the project site). It is estimated the transit trips would account for six percent of total traffic trips, which equates to approximately 17 new transit riders per Peak Hour. Assuming the existing Caltrain service would remain unchanged and continue to provide three trains during the peak commute periods, the estimated number of new transit riders using the Lawrence Caltrain Station would equate to approximately six riders per train during the AM and PM peak hours. Both Caltrain and the existing bus services can accommodate an increase in ridership demand resulting from the proposed project. The proposed project will not alter existing transit facilities or conflict with the operation of existing or planned facilities. Therefore, the project will have a less than significant impact on transit operations. **(Less Than Significant Impact)**

4.16.2.6 Other Transportation Issues

Airport Operations

The proposed project is located approximately three miles west of the Norman Y. Mineta San José International Airport. The proposed project will not result in a change in air traffic patterns or obstruct airport operations. **(No Impact)**

Emergency Access

Based upon a review of the conceptual site plan, the proposed project would not increase on-site hazards due to the design of the buildings, parking, or site improvements, and would not result in inadequate emergency access. **(No Impact)**

Parking

The existing 140,440 square foot office building on Parcel 3 currently has a small surface parking lot adjacent to the building. In addition, the location of the new proposed office building is currently a parking lot that the existing office building utilizes for off-site parking. As proposed, the existing office building and the proposed office building would share the proposed 1,000 space parking structure.

According to the City of Santa Clara Zoning Ordinance (Section 18.74.020, Required Off-street Parking), general business office buildings are required to provide one parking space per every 300 square feet of gross floor area. Based on the City's parking requirements, the proposed project would be required to provide 1,058 parking spaces for the total 317,547 square feet of existing and proposed office space.

In addition to the parking structure, the existing office building has 120 spaces in the adjacent surface lot and a 30 space parking lot is proposed adjacent to the new office building. In total, 1,150 parking spaces will be provided. Therefore, the proposed parking supply would be adequate to satisfy the City of Santa Clara parking requirements and no off-site parking would be required.

4.16.2.7 Transportation Demand Management Program

Employment generating development is required to develop and implement a TDM Program pursuant to General Plan Policy 5.8.5-P1 that would reduce project trips by a minimum of 10 percent. The project proposes to include the following elements, or alternative equivalents, in a TDM Program:

- Eco Passes or Clipper Cards for all employees for VTA transit and 25 percent transit subsidy for all other transit, including Caltrain, ACE, Capital Corridor, BART, MUNI, etc.
- Monthly vanpool subsidies
- Pre-tax deductions for transit costs
- Free shuttles to local train systems (e.g., Caltrain, Amtrak, ACE)
- Free Wi-Fi commuter busses
- Internal carpool matching program (by zip code)
- Regional carpool matching program (through 511)
- Personalized commute assistance by a Commute Coordinator
- Secure bicycle parking facilities
- Showers and clothes lockers for employees walking, biking, or taking alternative modes of transportation to work
- Preferred carpool/vanpool parking
- Intranet site for transit, bike, ridesharing, and telework information
- New hire orientations for alternative transportation modes
- Transit kiosks
- On-site amenities such as bicycle repair, dry cleaning, cafeteria, fitness center, ATM, etc., to reduce traffic trips.

4.16.3 Conclusion

With implementation of the identified mitigation measure, the proposed project would have a less than significant impact at all study intersections under existing plus project and background plus project conditions. **(Less Than Significant Impact With Mitigation)**

The proposed project would have a less than significant impact on nearby freeways. **(Less Than Significant Impact)**

The proposed project would have a less than significant impact on existing and planned pedestrian, bicycle, and transit facilities. **(Less Than Significant Impact)**

The project would not impact local airport operations or create hazards based on site design. **(No Impact)**

4.17 UTILITIES AND SERVICE SYSTEMS

The following analysis is based, in part, on a sanitary sewer study prepared by *RMC* in September 2015. The report is included as Appendix C.

4.17.1 Setting

4.17.1.1 Water Services

Water is provided to the site by the City of Santa Clara Water Utility. The system consists of more than 295 miles of water mains, 27 wells, and seven storage tanks with more than 27 million gallons of water capacity. Drinking water is provided by an extensive underground aquifer (access by the City's wells) and by two wholesale water importers: the Santa Clara Valley Water District (SCVWD) (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). The three sources are used interchangeably or are blended together. A water recharge program administered by SCVWD from local reservoirs and imported Sacramento-San Joaquin Delta water enhances the dependability of the underground aquifer.

Current Site Conditions

When fully occupied, the existing 140,440 square foot office building on Parcel 3 uses approximately 19,662 gallons of water per day.[42] Parcels 1 and 2 are currently developed with surface parking lots with approximately 22,296 square feet of landscaping. Landscape irrigation on Parcels 1 and 2 is estimated to use 1,895 gpd.[43]

Recycled Water

There are currently no recycled water lines in proximity to the project site.[44]

4.17.1.2 Wastewater Services

The City of Santa Clara Departments of Public Works and Water and Sewer Utilities are responsible for the wastewater collection system within the City. Wastewater is collected by sewer systems in Santa Clara and is conveyed by pipelines to the San José-Santa Clara Regional Wastewater Facility (Facility) located in San José. The Facility is one of the largest advanced wastewater treatment facilities in California and serves over 1,500,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.[45] The Facility has available capacity to treat up to 167 million gallons per day (mgd). The Facility presently operates at an average dry weather flow of 109 mgd, which is 58 mgd (or 35 percent) under its 167 mgd treatment capacity.[46]

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[42] Water usage on-site was estimated based on the standard office water usage data in a Water Supply Assessment prepared by the City of Santa Clara Water and Sewer Utilities for the 3333 Scott Boulevard Supplemental EIR (2015).
[43] *Ibid.*
[44] City of Santa Clara. Recycled Water System Map. www.santaclaraca.gov/index.aspx?page=2091 Accessed September 30, 2015
[45] City of San José, Environmental Services Division. <http://www.sanjoseca.gov/esd/>
[46] Santa Clara General Plan. *2010-2035.*

Approximately 10 percent of the Facility's treated effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

Current Site Conditions

On average, landscape irrigation is equal to approximately 10 to 15 percent of the total potable water use on commercial properties and the remainder (85 to 90 percent) is potable water that is assumed to exit the site as wastewater. The City's standard office water usage data for office buildings calculates landscape water usage and internal building water usage separately. Therefore, the total amount of wastewater generated per day is equivalent to the water usage noted above (19,662 gpd). The project site is served by a sanitary sewer line located in San Ysidro Way (eight-inch) which connects to a line in Tahoe Way (12-inch), which connects to an 18-inch line in Semiconductor Drive.

4.17.1.3 Storm Drainage

Runoff from the project site flows into the City of Santa Clara municipal storm drainage system. There is an existing 33-inch storm drain line in Kifer Road that serves Parcel 1 and a 27-inch storm drain line in the private road north of the project site that serves Parcel 2. Parcel 3 is also served by the line in Kifer Road.

4.17.1.4 Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. All other recycling services are provided through Stevens Creek Disposal and Recycling. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2024. The City of San José approved expansion of Newby Island Landfill and could continue to provide disposal capacity to Santa Clara beyond 2024. Prior to 2024, the City would need to amend their contract with Newby Island or contract with another landfill operator which would be subject to environmental review.

The California Integrated Waste Management Board (CIWMB) established a diversion requirement of 50 percent beginning in 2000. Based on the CIWMB 2008 Annual Report Summary, the City of Santa Clara has exceeded its diversion goal. In addition to the CIWMB requirements, the City of Santa Clara has a construction debris diversion ordinance which requires all projects over 5,000 square feet to divert a minimum 50 percent of construction and demolition debris from landfills.

Current Site Conditions

When fully occupied, the existing office building on Parcel 3 generates approximately 843 pounds of solid waste per day.[47]

[47] Cal Recycle. Web Site. http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm (6.0 pounds per 1,000 square feet per day) Accessed September 30, 2015.

4.17.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1-3
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1,2,3,16
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1-3
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	1-3
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	1-3
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1-3
7. Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1-3

4.17.2.1 Water Services Impacts

The proposed project would demolish the existing parking lots and construct a 177,134 square foot office building, a parking structure, a surface parking lot, and site improvements on Parcels 1 and 2. No changes are proposed on Parcel 3. The new development would use approximately 26,552 gallons of water per day (building and landscaping) which is 24,657 gallons of water per day more than the existing development. Of the 24,657 additional gallons of water per day that would be used on-site, approximately 16,308 gallons are the result in the increase in FAR over the General Plan. While the proposed project exceeds the assumed development on the project site, the additional 16,308 gallons of water per day not accounted for in the General Plan assumptions represents less than one-tenth of one percent of the total daily water demand of the City and would not exceed the capacity of the Santa Clara Water Utility to provide water services to the project site. Therefore, the project would have a less than significant impact on water supply. **(Less Than Significant Impact)**

4.17.2.2 Wastewater Services Impacts

San José/Santa Clara Water Pollution Control Plant

The San José/Santa Clara WPCP has the capacity to treat 167 mgd of wastewater. The City's average dry weather flow is 13.3 mgd based on 2009 data, while the City's allocation of treatment capacity is approximately 23 mgd.[48] The new development would generate approximately 20,958 gallons of wastewater per day. Of the 20,958 gallons of wastewater per day that would be generated by the project, approximately 13,862 gallons are the result in the increase in FAR over the General Plan. The overall increase would equate to less than one tenth of one percent of the City's total allocation of treatment capacity.[49] The proposed project would not increase the need for wastewater treatment beyond the capacity of the Facility. As a result, the Facility has the ability to treat wastewater generated by the proposed project. The project, therefore, would not have a significant impact on the capacity of the Facility. **(Less Than Significant Impact)**

Sanitary Sewer

Based on the sanitary sewer capacity evaluation, the sewer lines that serve the project site have sufficient capacity to serve the proposed development. With redevelopment of the project site, the main lines in Central Expressway and along Calabazas Creek would be approximately 15 to 80 percent full. The east line in Great America Parkway would be almost full and the west line would have a slight surcharge. There is over five feet of freeboard[50] at the surcharge location, in which case the surcharge is acceptable per the City's hydraulic design criteria. The sanitary sewer capacity evaluation concluded that no capacity improvements are needed to support the proposed project. As a result, implementation of the project would have a less than significant impact on the capacity of the existing sanitary sewer system. **(Less Than Significant Impact)**

4.17.2.3 Storm Drainage Impacts

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. The project will result in a two percent net increase in impervious surface area on-site and will comply with the Municipal Regional Stormwater NPDES permit requirements. As a result, runoff from the project site would not exceed the capacity of the local drainage system. **(Less Than Significant Impact)**

4.17.2.4 Solid Waste Impacts

The new development on-site would generate approximately 1,063 pounds of solid waste per day.[51] This increase represents less than one-tenth of one percent of the maximum daily intake allowed at the landfill.

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[48] Christopher De Groot. Assistant Director, Santa Clara Water and Sewer Utilities. Personal communication on the Neto Residential Project Initial Study, April 2010.

[49] Based on Citywide water usage estimates presented in the City of Santa Clara Draft 2010 – 2035 General Plan Final Environmental Impact Report, January 2011.

[50] The distance between ground level and water level.

[51] California Integrated Waste Management Board. Estimated Solid Waste Generation Rates for Commercial Establishments. April 1992. Solid waste generation was estimated at a rate of six pounds per 1,000 square feet per day for office space.

The Newby Island Landfill, located in San José, has an agreement with the City to provide disposal capacity through 2024. The City of San José approved expansion of Newby Island Landfill and could continue to provide disposal capacity to Santa Clara beyond 2024. In addition, the City is working to meet its waste diversion goal of 50 percent. Increased recycling will extend the useful life of the landfill. Implementation of the proposed project will not result in a significant increase in solid waste and recyclable materials generated within the City of Santa Clara and will not require that new landfill facilities be contracted with or constructed to serve the proposed project. **(Less Than Significant Impact)**

4.17.3 Conclusion

The project would not result in any utility or service facility exceeding current capacity or require the construction of new infrastructure or service facilities. **(Less Than Significant Impact)**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	1-16
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐	1-16
3. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐	1-16
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-16

4.18.1. Findings

The project would result in temporary air quality, water quality, biological, geological, and noise impacts during construction. With the implementation of identified best management practices and mitigation measures and compliance with City policies, the construction impacts would be mitigated to a less than significant level. Because the nature of the identified impacts are temporary and will be mitigated, the proposed project would not have a cumulatively considerable impact on air quality, water quality, or noise in the project area.

Implementation of the proposed project would result in the loss of 55 trees on-site. The trees to be removed will be replaced on-site consistent with City policy. The project will have no long-term effect on the urban forest or the availability of trees as nesting and/or foraging habitat. Therefore, the project would not have a cumulatively considerable impact on biological resources.

There are no known subsurface resources on or adjacent to the project site and the site has a low potential for buried historic and/or prehistoric resources. Because the potential cultural resource

impacts from implementation of the project will be mitigated, the proposed project would not have a cumulatively considerable impact on cultural resources in the project area.

The proposed project is consistent with the City's General Plan and Climate Action Plan and would not preclude the City or State from meeting emission reduction goals by the horizon year 2020.

The site has documented soil and groundwater contamination related to previous industrial land uses and also potentially has residual contamination from historic agricultural operations on-site. The identified hazardous materials impacts will be mitigated and would not result in a cumulatively considerable impact.

The proposed project is consistent with the current General Plan except for the FAR, and is not consistent with the zoning designation of the project site due to the proposed height of the building. Zoning Administrator approval will be needed to approve a 25 percent modification for the building height and lot coverage or the project will need to be reduced in size in order for the project to be consistent with applicable City land use regulations.

As discussed in the respective sections, the proposed project would have no impact or a less than significant impact on aesthetics, agriculture and forest resources, geology and soils, mineral resources, population and housing, public services, recreation, and utility and service facilities.

The proposed increase in FAR above assumed development conditions would result in small increases in water usage and wastewater generation. The increases would not, however, result in significant utilities impacts and are not considered cumulatively considerable. The proposed increase in FAR will result in a small increase in impervious surface area on-site. The project will, however, be required to reduce stormwater runoff consistent with the NPDES Municipal Permit. Therefore, while the size of the proposed development is not fully consistent with the assumptions in the General Plan, the project would not have a cumulatively considerable impact on the storm drainage system.

As discussed in Section 4.17.2.4, the new development on-site would generate approximately 1,063 pounds of solid waste per day. Of the 1,063 pounds per day of solid waste that would be generated by the project, approximately 701 pounds are the result in the increase in FAR over the General Plan. The City has several large projects currently under review that are outside the scope of the General Plan. Approval of these projects would result in a cumulative solid waste impact due to the uncertainty of future disposal capacity at existing landfills and the probability of new landfills. The additional 701 pounds per day of solid waste that would be generated by the project above the General Plan assumptions represents less than one percent of the total cumulative increase in solid waste generation. Therefore, while the project will add to the Citywide cumulative solid waste impact, the project's contribution is not cumulatively considerable.

Implementation of the proposed project would result in an LOS impact at the Lawrence Expressway/Kifer Road intersection under background plus project conditions. Mitigation was identified to reduce the impact to a less than significant level. Under cumulative plus project conditions, six of the study intersections would operate at an unacceptable LOS in both peak hours. The intersections are listed below and shown in Table 4.18-1.

- No.1 – Bowers Avenue and Central Expressway
- No. 3 – Oakmead Parkway-Corvin Drive and Central Expressway
- No. 6 – Lawrence Expressway and Reed Avenue/Monroe Street
- No. 7 – Lawrence Expressway and Kifer Road
- No. 8 – Lawrence Expressway and Arques Avenue
- No. 9 – Lawrence Expressway and Duane Avenue-Oakmead Parkway

TABLE 4.18-1
Study Intersections Level of Service – Cumulative Plus Project Conditions

No.	Intersection	Peak Hour	Delay	LOS	Increase Critical Delay	Increase V/C
1	Bowers Avenue and Central Expressway (CMP)	AM PM	**119.8** **174.2**	**F** **F**	**-0.1** **-0.1**	**0.003** **0.001**
2	Bowers Avenue and Kifer Road-Walsh Avenue (SC)	AM PM	29.8 45.2	C D	0.2 0.7	0.003 0.003
3	Oakmead Parkway-Corvin Drive and Central Expressway (CMP)	AM PM	**85.6** **94.5**	**F** **F**	**2.4** **0.4**	**0.005** **0.001**
4	Corvin Drive and Kifer Road (SC)	AM PM	8.1 8.5	A A	0.0 0.0	0.005 0.003
5	Kifer Road and Costco Driveway (SV)	AM PM	20.2 23.6	C C	0.3 0.4	0.005 0.007
6	Lawrence Expressway and Reed Avenue/Monroe Street (CMP)	AM PM	**288.9** **142.3**	**F** **F**	**3.9** **1.8**	**0.008** **0.003**
7	Lawrence Expressway and Kifer Road (SV)	AM PM	**279.5** **162.0**	**F** **F**	**-0.9** **10.2**	**0.012** **0.017**
8	Lawrence Expressway and Arques Avenue (CMP)	AM PM	**170.5** **165.9**	**F** **F**	**1.1** **1.5**	**0.002** **0.002**
9	Lawrence Expressway and Duane Avenue-Oakmead Parkway (SV)	AM PM	**105.2** **148.2**	**F** **F**	**1.1** **1.9**	**0.002** **0.002**
10	Lawrence Expressway and US 101 (South) (SV)	AM PM	37.1 71.0	D E	7.0 0.4	0.013 0.009
11	Lawrence Expressway and US 101 (North) (SV)	AM PM	19.5 28.9	B C	0.5 0.3	0.008 0.002
12	Kifer Road and Semiconductor Drive (SV)	AM PM	16.8 23.0	B C	0.3 0.0	0.025 0.035
13	Wolfe Road and Kifer Road (SV)	AM PM	29.7 38.9	C D	0.4 0.9	0.007 0.008
14	Wolfe Road and Evelyn Avenue (SV)	AM PM	32.1 30.3	C C	0.3 0.0	0.005 0.002
15	Wolfe Road and Reed Avenue-Old San Francisco Road (SV)	AM PM	36.9 38.7	D D	0.2 0.2	0.005 0.003

Under cumulative plus project conditions, implementation of the proposed project will cause the critical-movement delay at the Lawrence Expressway and Kifer Road intersection to increase by 10.2 seconds and the V/C to increase by 0.017 in the PM Peak Hour. As a result, implementation of the proposed project would have a cumulatively significant LOS impact.

Impact CUML-1: Implementation of the proposed project would result in a significant cumulative impact to the Lawrence Expressway/Kifer Road intersection in the PM Peak Hour. **(Significant Impact)**

Mitigation and Avoidance Measures

Mitigation Measures

The following mitigation measure, which is the same as the project level impact mitigation, will be implemented by the project to reduce the identified traffic impact to a less than significant level:

MM CUML-1.1: The impact at this intersection could be mitigated with the grade separation of Lawrence Expressway between I-280 and US 101, as identified in the Comprehensive County Expressway Planning Study. Therefore, the project will pay a fair-share contribution towards the identified improvements.

4.18.2 Conclusion

With implementation of the identified mitigation measure, the proposed project would have a less than significant cumulative transportation impact. **(Less Than Significant Impact With Mitigation)**

While the proposed increase in FAR will result in small increases in jobs, traffic trips, and utility usage over the General Plan assumptions, the proposed project would not have cumulatively considerable impact to any resource area. **(Less Than Significant Impact)**

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