

CHAPTER 4

Cumulative and Growth-Inducing Impacts

4.1 Cumulative Impacts

Introduction

The term “cumulative impacts,” as defined in §15355 of the CEQA *Guidelines*, refers to two or more individual effects that, when taken together, are “considerable” or compound or increase other environmental impacts. A cumulative impact from multiple projects is the change in the environment that could result from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable (i.e., probable) future projects. CEQA *Guidelines* §15130 provides pertinent guidance for cumulative impact analysis:

- An EIR shall discuss the cumulative impacts of a project when the project’s incremental effect may be individually limited, but “cumulatively considerable,” meaning that the project’s incremental effects are significant when viewed in connection with the effects of past, current, and probable future projects. An EIR should not discuss impacts that do not result in part from the Project evaluated in the EIR.
- A project’s contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The focus of the analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

Approach to Cumulative Impact Analysis

Two approaches to a cumulative impact analysis are provided for in CEQA *Guidelines* §15130(b)(1): (a) the analysis can be based on a list of past, present, and probable future projects producing related or cumulative impacts; or (b) a summary of projections contained in a general plan or related planning document or in an adopted or certified prior environmental document that described or evaluated regional or area wide conditions contributing to the cumulative impact can be used to determine cumulative impacts. For the purpose of this EIR, the analysis employs the list-based approach for some topics, and the plan-based approach for others.

The following factors were used to determine an appropriate list of projects to be considered in this cumulative analysis:

- *Geographic Scope and Location* – a relevant project is located within a defined geographic scope for the cumulative effect.
- *Similar Environmental Impacts* – a relevant project contributes to effects on resources that would also be affected by the proposed Project.
- *Timing and Duration of Implementation* – effects associated with activities for a relevant project (e.g., short-term construction or demolition, or long-term operations) would likely coincide in timing with the effects of the Project.

Projects that are relevant to the cumulative analysis include those that could contribute incremental effects on the same environmental resources and would have similar environmental impacts to those discussed in this EIR. The cumulative impact discussions below analyze the cumulative impacts that could occur when the impacts of the Project are considered in combination with the impacts of other past, present, and reasonably foreseeable future projects, which are generally subject to independent environmental review and consideration by the approving agencies. Consequently, it is possible that some of the reasonably foreseeable future projects will not be approved or will be modified prior to approval. For the purpose of assessing worst-case cumulative impacts, however, the cumulative impact analysis is premised on the approval and construction of all the reasonably foreseeable projects identified in this analysis.

Table 4-1 is derived from the City of Sunnyvale Community Development Department’s Development Update (City of Sunnyvale, 2013b). The table lists past, present and reasonably foreseeable projects considered in several of the cumulative analyses. The projects listed include recently completed past projects; projects that have been in existence for some time that have ongoing, known effects that clearly have the potential to combine with proposed Project impacts in a cumulative manner; and projects that are considered to be reasonably foreseeable because they have been approved or are already in the application, review, and approval process. Two sets of project types are included in the list: those within the “cumulative area” shown in **Figure 4-1**; and those projects that are of a similar type and are likely to have similar impacts. This second set includes other projects throughout the City of Sunnyvale that propose development of large office and research and development complexes. The “cumulative area” shown in Figure 4-1 includes areas within approximately one half mile of the Project site, within an area bounded by Stewart Drive to the north, Lawrence Expressway to the east, the CalTrain right-of-way to the south, and North Fair Oaks Avenue to the west.

The geographic scope of cumulative projects depends on the resource topic affected and is described under each topical section, below. For example, cultural resources impacts are generally site specific, and so the cumulative analysis for cultural resources considers other projects within the cumulative area shown in Figure 4-1. The context for cumulative land use impacts is the entire City of Sunnyvale, and projects similar to the Project located throughout the City are considered; these projects are shown in the inset map in Figure 4-1. For air quality, the context for the cumulative impact analysis is the entire Bay Area Air Basin, in which the Project is located.

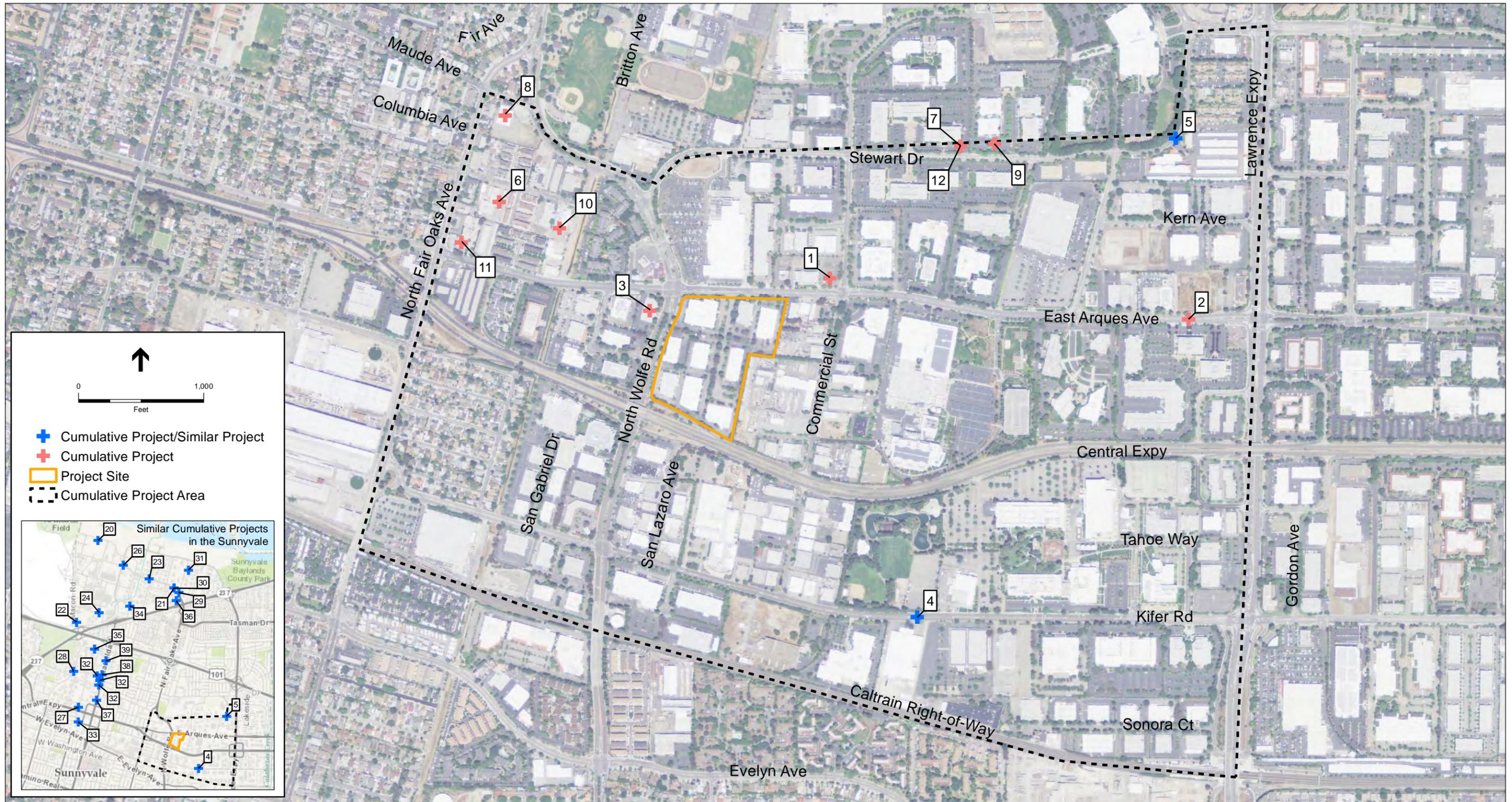
**TABLE 4-1
CUMULATIVE PROJECTS**

Map Reference	Project Type	Address	Description	Planning Permit File No.	Planning Permit Type	Planning Permit Status August 2013	Planning Permit Status Date
1	Commercial	927 E. Arques Ave	New multi-tenant commercial building and site improvements.	2010-7890	UP VAR	Approved	6/21/2011
2	Commercial	1165 E Arques Ave	Use Permit for new fitness center	2012-7625	UP	Approved	2/25/2013
3	Commercial	285 N. Wolfe Road	Convert existing vacant industrial building into Zen Center with on-site residential units for clergy and medical clinic.	2013-7513	UP	Approved	9/11/13
4	Industrial	1020 Kifer Rd	Demo and construction of a new 155,000 s.f. industrial building.	2012-7384	MPP	Approved	8/20/2012
5	Industrial	1070 Stewart Drive	Demolition of two buildings and construction of one new 4-story building for public storage (total addition of 151,112 sf).	2013-7551	UP	Pending Review	9/4/2013
6	Residential	628 E. Taylor	10 Townhouse units	2011-7377	SDP TM	Approved	8/17/2012
7	Residential	955 Stewart	Special Development Permit for 186 unit apartment project and parcel map to merge two parcels together.	2012-7381	SDP PM	Approved	8/27/2013
8	Residential	620 E. Maude	Application for 121 Affordable Housing Units General Plan Amendment, Rezone; and, Special Development Permit	2013-7103	GP RZ SDP	Approved	4/30/2013
9	Residential	975 Stewart	Special Development Permit for 57 unit apartment project and map to merge two parcels together (to 955 Stewart: 2012-7381).	2013-7155	SDP PM	Approved	5/13/2013
10	Residential	698 E. Taylor Ave	Redevelop industrial sites with 48 townhome-style condominium units and subdivision to create 13 ground lots.	2013-7272	SDP TM	Approved	8/26/2013
11	Residential	617 E Arques Ave	Special Development Permit for an 87-unit townhouse development	2013-7645	SDP TM RZ	Pending Review	8/15/2013
12	Residential	955 Stewart	Addition of 16 rental units (to 955 and 975 Stewart: 2012-7381 and 2013-7155)	2013-7642	SDP	Approved	9/23/2013
20	Industrial	1111 Lockheed Martin Way	New 2.43M sq. ft. office campus with 70% FAR development in a MP-TOD Zoning District. (Juniper Networks)	2002-0223	SDP	Approved	5/14/2002
21	Industrial	495 Java Dr.	Master Plan for 5 new R&D buildings, 1 amenity (café & fitness) building, and 3 multi-level parking structures resulting in total I of 1,375,978 sq. ft. in a MP-TOD Zoning District. (Site 1 Net App)	2005-0340	SDP	Approved	6/27/2005
22	Industrial	1000 Enterprise Way	Development of 50 acres of land with 7 buildings plus an amenity building and 3 parking structures (Moffett Towers)	2005-1198	GPA RZ SDP	Approved	11/14/2006
23	Industrial	111 Java Dr	3 new Office/R&D buildings totaling 387,196 sq. ft.	2006-1265	SDP	Approved	3/26/2007
24	Industrial	815 Eleventh	Major Moffett Park design review application for new 200,000 s.f. building (5th) at the Technology Corners campus (80% FAR). Includes modification to the development agreement.	2011-7119	SDP	Approved	9/13/2011
25	Industrial	1100 Enterprise	Major Moffett Park design review application for modification of building; in Moffett towers campus project (80% FAR). Building will increase from; 200,000 sf to 325,000 sf. Includes modification to the development agreement.	2011-7170	SDP	Approved	3/16/2011
26	Industrial	589 W. Java	Formal Submittal for Yahoo! campus expansion to add a new, 6-story 315,000 sq. ft. office building, 24,000 sq. ft. special use amenities building and one parking structure.	2011-7495	SDP	Approved	10/10/2011
27	Industrial	307-309 N. Pastoria Ave.	New 71,715 sq ft, 3-story office building on a vacant site resulting in approximately 45% far (using LEED green building bonus to achieve additional 10% FAR).	2011-7658	DR	Approved	4/3/2012
28	Industrial	580 N. Mary Ave.	Demolish existing post office building and construct a new 124,095 sq ft, 5-story office building resulting in approximately 55% FAR.	2011-7657	UP	Approved	2/7/2012
29	Industrial	1240 Crossman	Expansion of the NETAPP campus (site 2) utilizing the green building bonus to enable 75.8% FAR for a total of 525,057 s.f. two 4-story buildings (12 & 14) and a 4-level parking garage would be built. Two buildings (10 & 11) to remain.	2011-7759	PM SDP	On Hold	10/19/2011
30	Industrial	495 E Java Drive	Expansion of the NETAPP campus (site 1) utilizing the green building bonus to enable 76.4% FAR and a total of 1,496,971 s.f.; previously approved buildings 5 and 6 will increase by 120,996 s.f including a fifth story. A new 4-level parking garage is also proposed.	2011-7758	PM SDP	Approved	2/29/2012
31	Industrial	549 Baltic Way	Expansion of the NETAPP campus (site 3) utilizing the green building bonus to enable 60%; FAR for a total of 483,326 s.f. the site would be redeveloped with two 5-story buildings (15 & 16).	2011-7760	PM SDP	Approved	10/22/2011

**TABLE 4-1 (Continued)
CUMULATIVE PROJECTS**

Map Reference	Project Type	Address	Description	Planning Permit File No.	Planning Permit Type	Planning Permit Status August 2013	Planning Permit Status Date
32	Industrial	505 -599 N Mathilda, 550 Del Rey, 683 W. Maude, 510 N. Pastoria	Rezone of multiple properties to MS-100% FAR and Design Review to allow redevelopment with a 612,072 s.f. R&D campus, consisting of two six-story buildings, one four-story building, and a five-story parking garage. Project modified, per 2012-7711, to allow for additional floor area for a total of 643,897 and 96% FAR. Modified permit adds an additional parcel and a fifth story to building.	2012-7070, 2012-7711	RZ SDP	Approved	11/12/2012
33	Industrial	600 W. California	For a new 106,617 square foot office/R&D building within Sunnyvale Business Park resulting in a 47.8% FAR	2012-7304	SDP TM	Approved	10/30/2012
34	Industrial	1152 Bordeaux	Moffett Park; Major Design Review application for the demolition of several structures over several parcels and the construction of; 9 office buildings with 1.9 Million SF of office space, amenities building, on-site parking and parking structure.	2012-7854	SDP, GPA, RZ	Pending Review	11/5/2012
35	Industrial	645 Almanor Ave	Parcel Map, Re-Zone and Design Review ; to consider 100% FAR on an existing industrial property.	2012-8014	PM, RZ, DR	Pending Review	1/17/2013
36	Industrial	1221 Crossman Ave	Redevelopment of an existing office park with two new 7-story office buildings and one parking structure resulting in 541,214 s.f. (Moffett Gateway)	2013-7535	SDP	Approved	8//262013
37	Industrial	433 N Mathilda	Use Permit for demolition and new construction of a new 2 story building approximately 210,000 sf and far of 52%.	2013-7448	UP	Pending Review	8/2/2012
38	Industrial	615 N Mathilda Ave	Redevelop 8 parcels by combining the site into one site and construct two new 4-story R&D buildings with a total 264,000 s.f. (80% FAR), and serviced by a new 5-level parking garage.	2013-7609	DR	Pending Review	
39	Industrial	767 N Mathilda Ave	Redevelop two existing parcels into one and construct one new 6-story R&D office building (233,400 square feet in size) resulting in a 110% FAR and serviced by a 4- level parking structure.	2013-7610	DR	Pending Review	

SOURCE: City of Sunnyvale



SOURCE: City of Sunnyvale, Planning Division

Landbank Central & Wolfe Campus . 120442.01

Figure 4.1
Location of Other Projects for the Cumulative Impact Analysis

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Cumulative Impact Discussion

Land Use

The Project is one of several similar recent, current, and planned projects in Sunnyvale that involve development of large, multi-story research and development and office complexes (see Figure 4-1 and Table 4-1). Many of these projects involve replacement of relatively low density, low profile (i.e., 1-2 story) industrial developments with larger, more intensive, multi-storied buildings. Together, these projects represent a substantial change in land use in the City, particularly in the Moffett Park area, north of State Highway 237 and west of Caribbean Drive; and in the Peery Park area, west of North Matilda Avenue and north of West Evelyn Avenue, where most of these projects are located. New development -- particularly new industrial and office development -- is, however, anticipated in the 2011 General Plan, Chapter 2, Community Vision, which plans for 13.7 million square feet of new office/industrial development over a 20 year period. Therefore, while the Project, in combination with other similar projects, represents a major change in land use in the City, this change is generally consistent with the City's future vision, as described in the General Plan. Therefore, there is no significant cumulative impact on land use.

Population and Housing

As of 2012, there were approximately 1,071 housing units; 577,306 retail/service floor area and 3,181,294 square feet of office/industrial floor area which have been approved and have not been built (City of Sunnyvale, 2013a).

Using an average of 1 employee per 400 square foot for retail/service, 1 employee per 450 square feet for office/industrial, and a vacancy rate of 6.5%, approved development has the potential to add 7,960 employees to the City.¹ The Association of Bay Area Governments (ABAG) projects that 15,350 jobs will be added to the City by 2030, compared to 2010 levels (ABAG, 2013). The City of Sunnyvale plans for a similar level of growth in its General Plan (City of Sunnyvale, 2011). Considering these approved projects there would still be capacity under the ABAG projections to accommodate the 2,500 additional employees (about 2,100 net new employees at the Project site) anticipated for the Project. In addition, as discussed in Section 3.2, Population and Housing, there are additional mitigating factors such as unemployment and vacant housing which would further reduce the risk of impacts from growth. Considering past, present and future development in the City, the Project is anticipated to satisfy a portion of planned growth and thus would not contribute to a cumulative impacts on population and housing.

¹ These assumptions were derived from the City of Santa Clara General Plan (2010) which took into account the data from the surrounding region. Though the City of Santa Clara is smaller in comparison to Sunnyvale, it is comparable in terms of industries and location. The assumed vacancy rates represent an average rate for the next 25 years, which takes into account the cyclical nature of the real estate market and economy.

Aesthetics

The cumulative context for visual quality includes the cumulative area shown in Figure 4-1. The entirety of the cumulative area is urban, consisting of a mix of industrial, commercial, public, and residential uses. The area is relatively flat, most development is 1-2 stories, and there are abundant mature street and landscaping trees. Other projects in the cumulative area include residential, commercial, and industrial projects (see Table 4-1), and are subject to design review. Together, these projects will make small alterations to the character of the area, including redevelopment of existing, older structures, replacement of landscaping, and construction of more contemporary buildings. However, most of these projects will be within the existing street/block network and will not adversely affect any existing scenic resources. Overall, these cumulative projects are not expected to substantially degrade or alter the visual character of the area, and so no cumulative impact, either with or without the Project examined in this EIR, is expected.

More broadly, the Project is one of many similar, recent, current, and planned projects in Sunnyvale that involve development of large, multi-story research and development or office complexes (see Figure 4-1). Many of these projects involve replacement of relatively low density, low profile (i.e., 1-2 story) developments with more intensive and more visually prominent and distinctive uses. Together, these projects are changing the visual character of the City, particularly in the Moffett Park area, north of Highway 237 and west of Caribbean Drive; and in the Peery Park area, west of North Matilda Ave. and north of West Evelyn Ave. In these areas, low-lying, relatively low density, older developments are being replaced by architecturally distinctive, multi-story structures that add prominent new features to the visual landscape. Many of these structures stand alone, and are separated from other developments by landscaping, roadways, and parking lots. Together, these developments are altering the visual and aesthetic character of Sunnyvale by increasing building heights and density of development, and by giving new prominence to employment-generating uses, particularly compared to the City's more traditional emphasis on low-slung industrial parks as work places.

New development, particularly new industrial and office development is, however, anticipated in the 2011 General Plan, Chapter 2, Community Vision, which recognizes the potential for 13.7 million square feet of new industrial development over a 20 year period, including in the Moffett Park and Peery Park areas, as well as other industrial areas. Therefore, the Project, together with the other cumulative projects considered here, is generally consistent with the City's future vision, as described in the General Plan, and no other cumulative impact on scenic resources or aesthetic character is anticipated. The cumulative impact is, therefore, less than significant.

Traffic and Transportation

Impact CUM-TR: The Project, in combination with reasonably foreseeable future development Projects in the study area, would increase traffic volumes at area intersections. (Significant)

This section details expected traffic conditions at the study intersections under Cumulative (2023) Conditions (without and with the proposed Project). Traffic volumes under cumulative baseline conditions consist of existing traffic volumes multiplied by an annual growth factor derived from

the City of Sunnyvale travel demand model. Project-generated trips added to the cumulative baseline condition are identical to those assumed under Existing plus Project Conditions.

Growth factors were developed from the latest City travel demand model to estimate regional traffic growth in the study area and were applied to all turning movements at the study intersections. Based on the City model and roadway classifications, the following annual growth factors were applied: Arterials (2% during the a.m. peak hour and 1.75% during the p.m. peak hour); Collectors (2.28% during the a.m. peak hour and 2.34% during the p.m. peak hour); and Local Streets (0.5% during both a.m. and p.m. peak hours).

Cumulative Transportation Improvements

For the year 2023, no approved and funded transportation network improvements were assumed to be completed prior to occupancy of the proposed Project. Therefore, the existing conditions roadway network, traffic controls, and lane geometries are assumed for Cumulative Conditions.

Intersection Level of Service Analysis Results

The intersection LOS analysis results for the Cumulative No Project and Cumulative plus Project conditions are summarized in **Table 4-2**. Detailed calculation sheets are contained in **Appendix C**, as well as figures showing traffic volumes at the study intersections under Cumulative No Project and Cumulative plus Project conditions. All study intersections would operate within applicable jurisdictional standards of LOS D (City of Sunnyvale) and LOS E (VTA CMP) after the addition of Project-generated trips, with the following exceptions:

- Lawrence Expressway/Kifer Road - LOS F during the p.m. peak hour
- Commercial Street/Central Expressway - LOS F during both a.m. and p.m. peak hours

As shown in the table, addition of traffic generated by the proposed Project would not increase the average critical delay at the Lawrence Expressway / Kifer Road intersection by four seconds or more, or increase the critical volume-to-capacity (v/c) ratio by 0.01 or more. Therefore, based on applicable thresholds of significance, the proposed Project traffic would have a less-than-significant impact at that intersection, and no mitigation measures are required. However, increased delay and critical v/c ratio caused by the proposed Project at the Commercial Street / Central Expressway intersection would exceed the thresholds of significance, and the Project's cumulative impact increase is considered to be significant.

While the Cumulative plus Project Conditions analysis identifies a deficient service level at the Lawrence/Kifer intersection (LOS F), analysis of other individual intersections along Lawrence Expressway showed acceptable service levels. However, as identified in the Setting and as part of the previously-described "plus Project" analyses, field evaluation of vehicle progression on Lawrence Expressway revealed substantial vehicle queues that impede vehicle throughput. Although the proposed Project would add traffic volumes to this segment of Lawrence Expressway, the increased traffic due to the proposed Project would not meet CMP traffic impact definitions at any of the Lawrence Expressway study intersections. Also, the City treats queuing issues as operational issues unless overall intersection LOS thresholds are exceeded. Thus, the exacerbation of vehicle queues due to the proposed Project is not a significant impact.

**TABLE 4-2
INTERSECTION LEVELS OF SERVICE (LOS) – CUMULATIVE PLUS PROJECT CONDITIONS**

	Intersection	Peak Hour	Regional/ Local	LOS Standard	Traffic Control	Cumulative		Cumulative plus Project	
						LOS ^a	Delay ^b	LOS ^a	Delay ^b
1	North Fair Oaks Avenue/ U.S. 101 NB Ramps	A.M.	Regional	E	Signal	C	24.5	C	25.0
		P.M.				D	44.3	D	48.7
2	North Fair Oaks Avenue/ East Ahwanee Avenue	A.M.	Local	D	Signal	B	19.3	B	19.3
		P.M.				B	17.3	B	17.3
3	North Fair Oaks Avenue/ Caliente Drive	A.M.	Local	D	Signal	A	5.2	A	5.2
		P.M.				A	4.8	A	4.8
4	North Fair Oaks Avenue/ East Duane Avenue	A.M.	Local	D	Signal	D	40.2	D	40.2
		P.M.				C	33.4	C	33.5
5	North Fair Oaks Avenue/ North Wolfe Road	A.M.	Local	D	Signal	B	19.3	B	19.3
		P.M.				C	20.1	B	20.1
6	North Fair Oaks Avenue/ Maude Avenue	A.M.	Local	D	Signal	C	24.7	C	25.6
		P.M.				C	31.2	C	31.3
7	North Fair Oaks Avenue/ East Arques Avenue	A.M.	Local	D	Signal	C	29.4	C	29.6
		P.M.				C	34.5	D	35.1
8	North Wolfe Road/Stewart Drive	A.M.	Local	D	Signal	B	10.4	B	10.4
		P.M.				B	14.0	B	14.0
9	North Wolfe Road/ East Arques Avenue	A.M.	Local	D	Signal	C	23.8	C	25.6
		P.M.				C	30.2	C	31.1
10	North Wolfe Road/Central Expressway WB Ramps	A.M.	Regional	E	Signal	B	15.6	B	16.5
		P.M.				B-	18.4	B-	18.6
11	North Wolfe Road/Central Expressway EB Ramps	A.M.	Regional	E	Signal	A	9.9	B	12.0
		P.M.				C+	21.9	C+	22.5
12	North Wolfe Road/Kifer Road	A.M.	Local	D	Signal	C	20.5	C	20.5
		P.M.				C	30.1	C	30.3
13	North Wolfe Road/Evelyn Avenue	A.M.	Local	D	Signal	C	21.7	C	21.7
		P.M.				B	16.6	B	16.6
14	Lawrence Expressway/ U.S. 101 NB Ramps	A.M.	Regional	E	Signal	B	17.1	B	17.3
		P.M.				B-	19.4	B-	19.4
15	Lawrence Expressway/ U.S. 101 SB Ramps	A.M.	Regional	E	Signal	B	12.5	B	12.5
		P.M.				C	28.0	C	28.1
16	Lawrence Expressway/ Oakmead Parkway	A.M.	Regional	E	Signal	D	43.7	D	43.7
		P.M.				E+	58.2	E+	58.2
17	Lawrence Expressway/ East Arques Avenue	A.M.	Regional	E	Signal	C-	32.3	C-	32.6
		P.M.				D	50.8	D-	51.9
18	Lawrence Expressway/ Kifer Road	A.M.	Regional	E	Signal	C-	33.6	C-	33.9
		P.M.				F/2.02^c	106.4	F/2.02^c	106.4
19	Commercial Street/ Central Expressway	A.M.	Regional	E	Two-Way Yield	F/0.76^c	118.7	F/0.95^c	167.3
		P.M.				F/1.09^c	139.4	F/1.45^c	274.3
20	DeGuigne Drive/ East Arques Avenue	A.M.	Local	D	Signal	B	16.6	B	17.4
		P.M.				C	21.7	C	21.7

^a Signalized intersections – Delay / LOS is for overall intersection; Unsignalized two-way yield controlled intersections – Delay / LOS is for critical minor stop-controlled approach.

^b Delay = Average control delay per vehicle

^c Critical v/c values are reported for the intersection operating at unacceptable LOS.

Bold indicates LOS exceeds applicable jurisdictional standards for operating conditions.

SOURCE: TJKM (Appendix C)

In addition, as described above, the proposed Project would be required to contribute a proportionate fair share to the City's Traffic Impact Fee (TIF) program, which covers fair share contributions to major transportation improvement Projects planned by Santa Clara County, the City of Sunnyvale, and the City of Santa Clara. The Project fair share TIF contribution constitutes a reasonable means of addressing traffic issues on Lawrence Expressway to which the Project would contribute.

Mitigation Measure

Mitigation Measure CUM-TR: Implement Mitigation Measure TR-1 (reconstruct/reconfigure the Commercial Street / Central Expressway intersection to a full four-legged signalized intersection, with eastbound and westbound left-turn lanes on Central Expressway, and restriping northbound and southbound Commercial Street for one shared left-turn/through lane and one exclusive right turn lane).

As was described for Mitigation Measure TR-1 I Section 3.4, Traffic and Transportation, the peak hour volume signal warrant (Warrant 3) would be met during the p.m. peak hour under Existing plus Project Conditions. With implementation of Mitigation Measure TR-1, operations at this intersection would improve to LOS E or better under Cumulative Plus Project conditions.

Significance after Mitigation: *Significant and Unavoidable.* This Project impact would be significant and unavoidable because it is not certain that the measure could be implemented. The City of Sunnyvale, as lead agency, could not implement Measure TR-1 without the approval of Santa Clara County. However, in the event that Mitigation Measure TR-1 could be implemented, the impact would be less than significant.

Greenhouse Gas Emissions

As described in Section 3.6, *Greenhouse Gas Emissions*, the greenhouse gas emissions (GHG) analysis is considered exclusively cumulative, in that no single Project could result in a significant effect with respect to GHG emissions and climate change. See Section 3.6 for discussion regarding the Project's GHG analysis.

Air Quality

Regional air quality impacts are by their very nature cumulative impacts. Emissions from past, present and future projects contribute to adverse regional air quality impacts on a cumulative basis. By nature, air quality is largely a cumulative impact, and according to the BAAQMD, in the case of criteria pollutants, no single project would be sufficient in size, by itself, to result in emissions that are considered significant (BAAQMD, 2009). Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Therefore, if a project exceeds the identified project-level significance thresholds for criteria pollutants, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

As described in the discussion of Impact AIR-3 in Section 3.5, Air Quality, although emissions of oxides of nitrogen (NOx) would exceed the BAAQMD threshold, mitigation measures specified

in this EIR would reduce these emissions from Project operations to below BAAQMD CEQA thresholds of significance. These thresholds are based on the federal Clean Air Act New Source Review Program, under which BAAQMD requires that new stationary sources of pollutants must offset a portion of their emissions above a specified threshold, to ensure that these new sources do not cause or contribute to a violation of an air quality standard. Thus, the BAAQMD CEQA thresholds for regional criteria pollutants represent emissions levels at which new sources would not contribute to an air quality violation or result in a considerable net increase in criteria air pollutants, within the context of existing and future cumulative air quality conditions. Thus, because the Project would not exceed the applicable CEQA thresholds with respect to criteria pollutants, the Project would not make a cumulatively considerable contribution to air quality impacts, and the cumulative impact of the Project would be less than significant. With regard to the potential for the Project to contribute to more localized cumulative health risk from emissions of toxic air contaminants (TACs), Table 4-1 and Figure 4-1 identify four other recent and current projects within 1,000 feet of the Project site:

- 285 North Wolfe Road. A Zen center with eight residences for monks and a medical clinic are proposed across Wolfe Road, approximately 150 feet from the Project site.
- 927 East Arques Avenue. New commercial building construction, approximately 900 feet east of the Project site.
- 893 Kifer Road. New industrial building approximately 600 feet southeast of the Project site, across Central Expressway; and
- 698 East Taylor Avenue. Townhome construction proposed approximately 1,000 feet northwest of the Project site.

Two of the nearby cumulative projects listed above would place sensitive receptors (residents) close to the Project site.

As noted in the discussion of Impacts AIR-2 and AIR-4 in Section 3.5, Air Quality, during Project construction TAC emissions (DPM and PM 2.5) would result from use of diesel-powered construction equipment, but at relatively low levels and for a relatively brief duration. During Project operations, TAC emissions (again, DPM and PM 2.5) would result from periodic testing and occasional use of the emergency backup generator, which would also be diesel powered. However, the location of both of these projects would be upwind of the predominant north and northwest winds in the area of the Project site. In addition, BAAQMD will not approve a permit for a new stationary source that would result in a cancer risk of greater than 10 in one million. This would ensure a less-than-significant impact from the proposed generator on new sensitive receptors brought near to the Project site by cumulative projects.

The BAAQMD also identifies a cumulative cancer risk of 100 in one million as a significance threshold. This threshold is applied to a sensitive receptor with regard to all sources, existing and proposed, within 1,000 feet. The only existing sensitive receptor within 1,000 feet of the Project site is 575 feet northwest of the Project. BAAQMD's data base of stationary sources indicates that there are eight permitted stationary sources within 1,000 feet of this existing receptor. Summing the risks associated with these eight sources and assuming that the proposed new

generator would contribute a maximum of an additional nine in one million, the cumulative risk would be 15 in one million at the nearest existing receptor. This cumulative risk is less than the 100 in one million threshold considered by the BAAQMD and cumulative health risk impacts to this existing receptor would be less than significant.

Given that TAC emissions from Project construction and operations would be relatively minor, and that TAC concentrations would be expected to be low at the location of proposed new uses that would bring new sensitive receptors close to the Project site, the Project's contribution to cumulative health risk impacts would not be expected to be cumulatively considerable, and the impact would be less than significant.

Biological Resources

As discussed in Section 3.8, Biological Resources, the Project site contains few biological resources, and with implementation of the mitigation measures specified in that section, Project activity would have a less-than-significant effect on biological resources. Also as described in Section 3.8, there are few natural biological resources in the Project vicinity, as it is located within a matrix of roadways, commercial lots, and otherwise developed landscape. Other projects in the cumulative Project area shown in Figure 4-1 and listed in Table 4-1, are on previously developed properties, and would also have only limited impacts on biological resources. As a result, current and reasonably foreseeable future development in the area around the Project site is not expected to have a significant cumulative effect on biological resources.

As discussed in Impact BIO-6 in Section 3.8, Biological Resources, while the Project would result in emissions of nitrogen-containing compounds, the volume of these emissions is not expected to have a substantial adverse effect on serpentine soils in the Santa Clara Valley, or the special status species that depend on them. The potential for the Project to make a cumulatively considerable contribution to the regional impact of nitrogen deposition is discussed here. The geographic context for analysis of cumulative impacts to biological resources includes the entirety of the Santa Clara Valley.

The Project site is approximately 10 miles northwest of the nearest area of designated serpentine soil, as mapped in the Santa Clara Valley Habitat Plan (Habitat Plan). In Appendix E of the Habitat Plan, the simulations of nitrogen deposition indicate that more than 60% of the nitrogen deposition is derived from emissions within Santa Clara County, with about half of this coming from mobile sources within about two miles of the habitat areas (County of Santa Clara, et al., 2012).

San Francisco Bay Area serpentine soils support native grasslands which in turn provide habitat to a suite of rare species, one of which is the Bay checkerspot butterfly (*Euphydryas editha bayensis*). The checkerspot butterfly is a federally threatened species that relies on grassland host plants, such as denseflower Indian paintbrush (*Castilleja densiflora*) and California plantain (*Plantago erecta*), for its larvae. When nitrogen is deposited on serpentine soils, the soils become nitrogen-enhanced, which enables invasive plant species to fully utilize this increased amount of nitrogen to their advantage. Non-native grasses will invade and dominate over native species,

resulting in decreased native plant composition, and a reduction in the number of host plants for the checkerspot butterfly. This reduction in host plants is ultimately detrimental to the survival of this threatened species (Weiss, 1999).

As described in Impact BIO-6 in Section 3.8, Biological Resources, emissions from Project construction and operation would not in themselves be of sufficient volume to cause nitrogen deposition that would adversely affect serpentine grasslands and other vegetation types in the Santa Clara Valley. The Project's operational (mitigated) emissions of nitrogen oxides (NO_x), which would total approximately 38 pounds per day (see Table 3.5.6 in Section 3.5) would represent only approximately 0.02% of overall Santa Clara County NO_x emissions of 83.6 tons per day (167,200 pounds per day) (CARB, 2010). While overall countywide NO_x emissions would result in nitrogen deposition and could harm serpentine habitat and associated special-status species, as well as other vegetation types, across the Santa Clara Valley, the Project's incremental contribution would be very small. Moreover, in order to offset the potential regional impact of nitrogen deposition on serpentine habitat and associated special-status species as well as other sensitive habitat types, the Project applicant has committed to paying a voluntary "nitrogen deposition" fee to the Santa Clara Valley Habitat Plan Joint Powers Authority. The amount of the fee will be calculated using Table 4.6 of the Santa Clara Valley Habitat Plan Development Fee Nexus Study (Santa Clara County et al., 2012) and the expected net daily vehicle trips generated by the Project. This fee will allow the Santa Clara Valley Habitat Plan Joint Powers Authority to acquire and manage serpentine grasslands and other habitat types affected or potentially affected by nitrogen deposition, thus compensating for any degradation or loss of habitat due to nitrogen deposition. Based on the foregoing, the Project's cumulative impact would be less than significant.

Noise

There are four other projects on the City of Sunnyvale's Development Update that are in various stages of planning and are located within 1,000 feet of the Project site (see Table 4-1 and Figure 4-1). These four projects could potentially be constructed concurrently with the Project, and noise from their construction could combine to cause a cumulative impact. These projects include:

- 285 North Wolfe Road. Remodel an existing building for expansion of the neighboring Zen center, with eight residential units for monks serving at the center and a Chinese traditional medicine clinic. The location is across North Wolfe Road from the Project site, approximately 150 feet from the Project site.
- 927 East Arques Avenue. New commercial building construction, approximately 900 feet east of the Project site.
- 893 Kifer Road. New industrial building approximately 600 feet southeast of the Project site, across Central Expressway; and
- 698 East Taylor Avenue. 48 new townhouse condominium units on an existing industrial site, approximately 1,000 feet northwest of the Project site.

The potential exists for one or more of these other projects to be constructed concurrently with the Project. Noise from two or more concurrently active construction sites could temporarily increase noise levels at the site of sensitive receptors within close proximity to both sites. As discussed in Section 3.7, Noise, the nearest existing sensitive residential receptors to the Project site are apartments located approximately 575 feet northwest of the proposed Building 1. In addition, there is a church approximately 600 feet west of the Project site and an existing Zen Center approximately 350 feet west of the Project site. New residences for Zen Center monks are planned in an adjacent building, about 150 feet from the Project site. The cumulative projects noted above at 927 East Arques Avenue and 893 Kifer Road are too distant from these sensitive receptors for there to be the possibility that construction noise from these projects would combine with Project construction noise to cause a cumulative noise impact. The Parkside Apartment Homes (the closest existing residences), the Zen Center, and the church may all be affected by construction noise at 698 East Taylor Avenue. The 698 Taylor project is, however, relatively small, and is already approved. It is likely that construction there will be completed before construction of the Project begins; or at worst, there will be minimal overlap. Furthermore, Mitigation Measures NOI-1 and NOI-2 (see Section 3.7, Noise) would reduce the contribution of the Project to any cumulative noise impact that does occur. For these reasons, cumulative construction-related noise impacts would be less than significant.

With regard to cumulative operational noise, the cumulative projects listed above would not be expected to cause substantial operational noise, based on the intended uses. The only major new noise source associated with Project operations would be from the periodic testing and occasional use of an emergency backup generator. The generator, however, would be located at the southern end of the site, at considerable distance from existing and future sensitive receptors. Future residents at the Zen Center would be the closest sensitive receptors, at approximately 700 feet from the backup generator. At this distance, the generator would produce noise levels of approximately 63 dBA, after accounting for the presence of intervening structures. This resultant noise level would be similar to existing noise levels along a 100 foot setback from North Wolfe Road (City of Sunnyvale, 2011), so there is no potential for this new noise source to combine with other new noise sources to cause a significant cumulative noise impact at the Zen Center. Therefore, operational noise from the Project, even when combined with new noise sources from the cumulative projects examined, would not be expected to combine to cause a significant cumulative noise impact for sensitive receptors in the vicinity.

Geology and Soils

The San Francisco Bay Area is within a seismically active region with a wide range of geologic and soil conditions. Due to widely varying conditions and the types of local impacts that result from seismic and soils hazards, the geographic scope for considering cumulative impacts includes the Project site and the cumulative area shown in Figure 4-1. Projects from the cumulative projects table adjacent to the Project site (Table 4-1) include a planned commercial building development at 927 East Arques Avenue and a building conversion project at 285 North Wolfe Road. The combination of the proposed Project and these two adjacent projects constitutes the list of cumulative projects for Geology and Soils.

Project site development, combined with the above-referenced cumulative projects, would result in increased population in an area subject to seismic risks and hazards. However, any new project, including the proposed Project, would be required to meet building code requirements that address the various seismic and geologic hazards present in the Bay Area region, which would reduce cumulative impacts related to geology, soils, and seismicity. Development projects are required to meet the most recent geologic and seismic standards. Generally, compliance with applicable building and other codes, as would be required for all present and future cumulative projects, and would reduce the potential for cumulative impacts.

Project site development, combined with past, present, and other foreseeable development in the area, would adhere to current building code and other regulatory requirements and would not therefore result in a cumulatively significant impact related to exposing people or structures to risk related to geologic hazards, soils and/or seismic conditions.

Hydrology and Water Quality

The geographic area for the analysis of cumulative impacts for hydrology and water quality is the Calabazas Creek watershed, particularly the heavily urbanized northern portion of the watershed in the vicinity of the proposed Project, which drains into the southern portion of San Francisco Bay. The cumulative analysis considers the past, present, and probable future projects listed in Table 4-1 and Figure 4-1.

Several other recent, current, and foreseeable future projects are located in the urbanized northern portion of the Calabazas Creek watershed. As noted above, the majority of the watershed, and especially the northern portion, has been heavily urbanized and no longer reflects historic conditions in terms of stormwater quality, volume, and drainage. Stormflows in the majority of the watershed are generated as runoff from paved surfaces and drain down gradient into stormwater conveyance systems and can contain a high concentration of pollutants typical of urbanized watersheds. Streams in the vicinity of the proposed Project have been channelized to provide flood protection and convey stormflows to San Francisco Bay.

The Project would not represent a substantial land use change within the watershed, especially as compared to current conditions at the site and in the surrounding area. The Project site is currently paved with impervious surfaces and contributes associated stormflows off site. Under the Project, there would be an overall decrease in the amount of impervious surfaces. Therefore, the Project will result in a net reduction in stormwater flows offsite. Because the Project will reduce stormflows, the potential for altered drainage causing a cumulatively considerable contribution to offsite sedimentation, erosion, or flooding downstream would be less than significant.

As described in Section 3.10, Hydrology and Water Quality, water quality impairments listed on the 303(d) list for surface waters within the watershed include diazinon (pesticide). However, as of December 31, 2004, the EPA has made the sale of diazinon unlawful for all outdoor, non-agricultural uses (EPA, 2013). Because the proposed Project is not agricultural, diazinon cannot

be purchased for landscape maintenance and cumulative impacts related to water quality impairments within the watershed would be less than significant.

Concurrent construction of the proposed Project and other projects in the Calabazas Creek watershed could result in increased erosion of exposed soils during land disturbing activities and subsequent sedimentation, which could have a cumulative effect on the water quality of receiving waters. Also, any inadvertent release of fuels or other hazardous materials during concurrent construction of projects could affect the water quality in the stream channels or storm drains that eventually flow into South San Francisco Bay. As described under Impact HYD-1 in Section 3.10, the applicant would minimize Project impacts relating to construction water quality by complying with the applicable water quality regulations, including preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP), complying with City of Sunnyvale municipal code requirements, employing best management practices (BMPs), and practicing control measures to manage and reduce erosion, stormwater runoff, and sedimentation downstream. Additionally, new development requirements imposed by the municipal code include standards that address stormwater runoff quantities (consequently reducing flooding risks) and water quality. By promoting Low Impact Development (LID) drainage improvements that facilitate on-site infiltration and treatment of stormwater runoff through bio-filtration, for example, future development would contain drainage improvements that minimize impacts to receiving waters both in terms of minimizing flooding risks and potential water quality stressors. Adherence to these requirements would generally improve stormwater quality and reduce the amount of stormwater going offsite as compared to existing conditions. Compliance with the State General Construction Permit, Santa Clara Valley Urban Runoff Pollution Prevention Program and City of Sunnyvale requirements would reduce potential cumulative impacts associated with stormwater runoff and water quality associated with redevelopment of the Project site. In addition, any potential cumulative flooding impacts would be reduced to a less-than-significant level by existing regulations. Given the measures taken to reduce and avoid hydrologic and water quality impacts related to construction and operation of the Project, the Project would not be expected to make a considerable contribution toward any cumulative water quality or hydrology related impacts in the Calabazas Creek watershed.

Hazards and Hazardous Materials

Cumulative health and safety effects could occur if activities at the Project site and other existing and proposed development, together, could increase risks in the vicinity of the Project site. Cumulative health and safety impacts could occur if outdoor or off-site hazards related to Project development were to interact or combine with those of other cumulative development within and around the Project site. These impacts could occur through limited mechanisms: air emissions, groundwater contamination, transport of hazardous materials and waste to or from the Project site, inadvertent release of hazardous materials to the sewer or non-hazardous waste landfill, and potential accidents that require hazardous materials emergency response capabilities. Air emissions are addressed in Section 3.5, *Air Quality* and above. The other mechanisms for cumulative off-site effects are discussed below.

Because several development projects within the vicinity of the Project could involve the same streets and highways used by other proposed developments in the Project area, the Project could contribute to cumulative increases in the amount of hazardous material transported to and from the Project site. Cumulative increases in the transportation of hazardous materials and wastes would cause a less-than-significant impact because the probability of such accidents is relatively low due to the stringent policies regulated the transport, use, and storage of hazardous materials. The Project would be required to comply with State and federal laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials.

With respect to hazardous materials affecting the public or the environment, effects are generally limited to site-specific conditions and depend on past, present, and future industrial uses and existing soil and groundwater conditions. Development projects within the vicinity of the Project would likely use hazardous materials during construction. However, construction of other proposed development would be required to comply with measures such as SWPPP, BMPs, and federal, State, and local requirements. As such potential cumulative impacts related to use of hazardous materials during construction would be less than significant.

The Project could contribute to cumulative increases in the demand for hazardous materials emergency response capabilities in the City of Sunnyvale. Any development involving increased hazardous materials use has the potential to increase the demand for emergency response capabilities in the area. However, first response capabilities and hazardous materials emergency response capabilities are currently available and sufficient for all cumulative projects, none of which would be expected to be a major user of hazardous materials; rather, most would use modest quantities of common cleaning materials, lubricants, fuels and the like. Furthermore, substantive hazardous materials accidents at the Project site or vicinity are expected to be rare, and when such incidents would occur, only one such incident would be expected at any one time (except during major catastrophes, such as major earthquakes). Furthermore, additional hazardous materials response services could be available through other jurisdictions. Therefore, this cumulative impact would be less than significant.

Cultural Resources

The geographic scope for cumulative impacts on cultural and paleontological resources includes the Project site and the cumulative project area shown in Figure 4-1. The Project could contribute to cumulative impacts on cultural resources, including archaeological and paleontological resources, if the cumulative projects were to adversely impact the same resources or cause impacts on other cultural resources in the Project vicinity. Excavation associated with the Project could potentially impact unknown archaeological resources and/or human remains. Some of the cumulative projects in the proposed Project vicinity would also involve excavation. These projects could also encounter known or previously unrecorded archaeological resources or human remains. Taken together, unmitigated impacts of the Project, combined with impacts of nearby projects, could together be cumulatively considerable, and the Project's contribution to such a cumulative impact could be considerable, and therefore significant.

However, the Project's potential to encounter unknown archaeological resources and human remains would be reduced to a less-than-significant level with implementation of Mitigation Measures CUL-2 and CUL-4 (see Impacts and Mitigation Measures discussion in Section 3.12, Cultural Resources). Mitigation Measure CUL-2 would ensure that ground disturbing activities are monitored by a qualified archaeologist to ensure that there are no impacts to unknown archaeological resources uncovered during Project construction and would ensure that work would halt in the vicinity of an unanticipated find so that a qualified archaeologist can make additional recommendations to reduce potential impacts to a less-than-significant level. Mitigation Measure CUL-4 would ensure that if human remains are uncovered during Project implementation, the Most Likely Descendant would be contacted and the remains treated appropriately.

Implementation of these measures would effectively avoid damage to or loss of archaeological resources and human remains, and little to no residual impact would remain after mitigation. With implementation of these mitigation measures, the Project's contribution to any cumulative impact on cultural resources would be less than significant.

Utilities and Service Systems

For all impacts described below, the geographic area for the assessment of cumulative impacts encompasses the Project site and the surrounding areas of the City of Sunnyvale unless otherwise stated. The geographic area for cumulative impacts on landfill capacity consists of Santa Clara County.

Wastewater

As discussed under Impacts UTL-1 and UTL-2 (see Section 3.13, Utilities and Service Systems), the Project would generate an estimated peak wastewater flow of 38,287 gallons per day (gpd). This rate of flow would be well within the existing remaining available capacity of the wastewater treatment plant, which is approximately 14.5 mgd. Other Sunnyvale development projects listed in Table 4-1 would similarly intensify land use and may result in comparably incremental increases in demands for wastewater treatment. Remaining available capacity is, however, sufficient to accommodate wastewater flows from the cumulative projects, without a cumulative impact on availability of wastewater treatment capacity. Therefore, there is no existing or foreseeable cumulative impact of this kind.

Also as discussed under Impact UTL-2, adding the projected wastewater flow from the Project to the current estimated peak wet weather flow of 0.091 mgd would increase flow in the receiving sanitary sewer main to 0.243 mgd, which represents 77.6% of the 0.313 mgd estimated capacity of the main when flowing at 75% full (or about 58% of the total capacity of the sewer main). The increase in flow would therefore be less than the available capacity of the existing 10-inch main, and the pipe has capacity to serve the increased flow of wastewater associated with the Project (BKF Engineers, 2014), while leaving approximately 42% of the capacity of the main available to accommodate other projects. This sanitary sewer main lies beneath East Arques Avenue, and flows from west to east. It collects wastewater from parcels along East Arques Avenue and

North Wolfe Road. As shown in Figure 4-1 and in Table 4-1, only one cumulative project is located on either of these streets “upstream” of the Project site: the expansion of the Zen Center (project 3 on the figure and in the table), which includes the addition of eight residential units. Two other cumulative projects are located “downstream” of the Project site, a new multi-tenant commercial building at 927 East Arques Avenue, and a new fitness center at 1165 East Arques Avenue (projects 1 and 2 on the figure and in the table). Because of the relatively small size of these developments, the substantially built-out character of these developments, and the relatively large amount of capacity available in the sanitary sewer main that would serve them, it is anticipated that the remaining capacity in the sanitary sewer could easily accommodate additional wastewater flows that these projects may produce, even in addition to the wastewater flows from the Project. Therefore, no cumulative adverse affect on sanitary sewer capacity is anticipated.

Stormwater

As discussed in Impact UTL-3 in Section 3.13, the Project would include a new storm drainage system throughout the Project site that would connect to existing stormwater pipelines in the vicinity of the Project site. The planned storm drainage system would comply with elements of the Municipal Non-Point Discharge Elimination System (NPDES) Stormwater permit by implementing LID treatment controls such as bioretention facilities for stormwater runoff prior to discharging into the stormwater system. Overall, there is expected to be a reduction in stormwater discharge from the site, relative to existing conditions. Therefore, the Project would not contribute to potential cumulative drainage impacts.

Water Supply Availability and Water Treatment

As discussed under Impact UTL-4 in Section 3.13, the Project would slightly decrease the Project site’s demand for potable water and no new construction of water treatment facilities would be required. Approximately 24,747 gpd of recycled water would be used for irrigation, flushing and mechanical purposes, which would reduce Project’s potable water supply demand. As described in Section 3.13, the water demand projections for the Project calculated by applicant were reviewed by the City of Sunnyvale’s Environmental Services Department, and the Department has confirmed that its water supply is adequate to meet existing and projected demand (City of Sunnyvale, 2013c). Additionally, as described in Section 3.13, the City of Sunnyvale has contracts in place and adequate supplies from SFPUC, SCVWD, groundwater, and recycled water to meet the proposed project’s water demand. No significant additional facilities or expansion needs beyond those already underway or planned would be required to serve the Project. Other Sunnyvale projects past, current, and reasonably foreseeable future projects (see Table 4-1) would result in incremental demand increases for potable water as well. The Sunnyvale General Plan, however, contemplates and plans for this development, and this growth is factored into the projections on which the City bases its infrastructure and supply planning. For these reasons, cumulative impacts on water supply and water treatment and distribution systems would be less than significant.

Landfill Capacity

As discussed under Impact UTL-5 in Section 3.13, through compliance with the City’s demolition debris permit, disposal of the Project’s construction and demolition debris is not

anticipated to result in a significant impact. Once Project construction is completed and the Project becomes operational, it would generate solid waste that consumes less than 0.1% of the daily permitted capacity at the Kirby Canyon Landfill. Considering the remaining capacity at the Kirby Canyon Landfill, and that capacity estimates account for all planned development, there should be sufficient capacity to handle construction, demolition and operational waste resulting from the Project. Similar to the proposed Project, other projects in the vicinity would also be subject to the City's diversion goals, which would reduce estimated increases in solid waste generation. Therefore, with or without the proposed Project, there is currently no cumulative impact on landfill capacity.

Public Services

The geographic setting for cumulative impacts to public services includes all areas within each public service provider's service area, or within the service areas of the City's Department of Public Safety; El Camino Hospital, Kaiser Permanente Santa Clara Medical Center or other nearby hospitals; Sunnyvale School District and Fremont Unified High School District; and the City of Sunnyvale and the Santa Clara County Parks and Recreation Department service area for parks and recreation services. Past, present, and reasonably foreseeable future projects, including those listed in Table 4-1, have and would continue to be required to comply with existing regulations and existing fee structures regarding public services.

Police Services

As described in Section 3.14, Public Services, implementation of the Project would not be expected to have a substantial negative effect on police services, though the Project may incrementally increase calls for police service in the area. The Project is one of several recent, current and reasonably foreseeable future projects that are increasing the intensity of land use in the City of Sunnyvale, primarily by replacing low-density commercial and industrial developments with multi-story office, industrial, and research and development centers. These other projects, which are shown in Figure 4-1 and listed in Table 4-1, may also be expected to result in incremental increases in demand for police services.

The intensification of uses noted above is anticipated in the Community Vision chapter of the City's 2011 consolidated General Plan, which projects an increase in office/industrial floor space of 7.6 million square feet, and an increase in employment of 24,800 new jobs, between 2005 and 2025. The General Plan cites the need for planned, balanced growth of commercial and residential space, population and jobs, and infrastructure and public services, as expressed in Citywide Vision Goal I. In addition, as part of the City's development review and approval procedures, the Department of Public Safety reviews proposed site plans and provides recommendations related to security features and opportunities to reduce crime. This requirement, which applies to all major developments, can be expected to minimize the creation of crime associated with new developments.

Because the Project, in combination with other recent, current, and foreseeable future development within the City are already anticipated in the City's General Plan, and the City is

actively planning for balancing growth with improvements in infrastructure and City services, and the Department of Public Safety will review proposed new developments and make recommendations to reduce crime. Therefore, the Project is not expected to contribute to a significant adverse cumulative impact on police services.

Fire and Emergency Medical Services

As with police services, implementation of the Project and other recent, current, and foreseeable future development projects in the City could lead to an increase in the demand for fire services. However, similar to the Project, all proposed development projects elsewhere in the City would incorporate fire detection and suppression systems, emergency access, and properly placed fire hydrants as required by the Sunnyvale Fire Code, and would comply with the California Building Code and the California Fire Code. All proposed development would also be reviewed by the Fire Services Bureau to ensure compliance with required State and local fire and building codes. As a result, all projects are expected to contain adequate design measures and infrastructure to support fire response. The Project, like other development projects, will be required to consult with the Department of Public Safety to ensure that there are sufficient services available to serve the Project. Therefore, the Project's contribution to any cumulative impact on fire protection services is not expected to be cumulatively significant.

Similarly, implementation of the Project and other recent, current, and foreseeable future development projects in the City could lead to an increase in calls for emergency medical services and an increase in the demand for emergency medical services at area hospitals and emergency rooms. As described above, the Project, in combination with other recent, current, and foreseeable future development within the City, are already anticipated in the City's General Plan, and the City is actively planning for balancing growth with improvements in infrastructure and City services. Furthermore, any increase in calls and demand for emergency medical services at these hospitals related to the Project can be expected to be minor and incremental, and would not be expected to result in the need for new or expanded facilities. Therefore, the Project's contribution to cumulative impacts on emergency medical services at area hospitals would not be cumulatively considerable.

Schools

The proposed Project, in combination with other development in the Sunnyvale School District and Fremont Union High School District boundaries, would increase the demand on the school districts. As described in Section 3.14, school fees from individual development projects would be collected pursuant to SB50 to fund construction of new school facilities, as required and allowed by State law. Therefore, the contribution of the proposed Project to cumulative impacts on school services would not be cumulatively considerable and would be less than significant.

Parks

As described in Section 3.14, the City's General Plan sets forth the goal of providing and maintaining adequate and balanced open space and recreation facilities for the community (Goal LT-8). Considering the City's 2013 population of approximately 146,000, the City currently provides approximately 5.1 acres of park and recreation space per 1,000 residents. This

service ratio is within the National Recreation and Park Association's recommendation of between 4 and 6 acres of parkland per 1,000 residents (City of Sunnyvale, 2011). The jobs generated by the proposed Project could result in some increase in population in the City, thereby incrementally reducing the amount of parkland per 1,000 residents. However, the Project includes on-site recreational facilities, which are expected to meet the recreational needs of new employees generated by the project. Given that the Project would not meaningfully affect the ratio of parkland to residents and would provide new on-site facilities for use by employees, the Project's contribution to cumulative impacts on local and regional parks would not be cumulatively considerable and would be less than significant.

4.2 Growth-Inducing Impacts

The CEQA *Guidelines* (§ 15126.2[d]) require that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA *Guidelines* as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth.... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a public service that otherwise limits growth.

The CEQA *Guidelines* further explain that the environmental effects of induced growth may be indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected, would exceed available services, or would otherwise result in an identifiable secondary impact as discussed above. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service and solid waste

service. A project that would induce “disorderly” growth (conflict with the local land use plans) could indirectly cause additional adverse environmental impacts and other public services impacts. Thus, to assess whether a growth-inducing project will result in adverse secondary effects, it is important to assess the degree to which the growth accommodated by a project would or would not be consistent with applicable land use plans.

Components of Growth

The timing, magnitude, and location of land development and population growth in a community or region is based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type and intensity of growth, it is the primary means of regulating development and growth in California.

Growth-Inducing Impacts

The Project “could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment” (§ 15126.2(d) of the CEQA *Guidelines*). This section summarizes topics and impacts also addressed in Section 3.2, *Population and Housing*, which provides the context for evaluating growth-inducing impacts.

The Project would support growth of business activity with approximately 2,100 additional jobs. No direct development of residences is proposed; however, the Project would result in an indirect growth in population throughout the region, as the proposed development would create new jobs resulting in an additional demand for housing. As described in Section 3.2, *Population and Housing*, the approximately 2,455 vacant units in Sunnyvale could fulfill the demand for new housing if some workers decided to relocate within the City limits. There are also approximately 4,862 unemployed workers in the City labor force; to the extent that some might be employed by the proposed development, these employees would not need to relocate.

The City has planned to balance job and housing growth and since 2010 has approved the development of 1,071 new housing units. More residential development is proposed but not yet approved. The Regional Housing Needs Allocation Plan anticipates that the City would need at least 5,452 additional units by 2022 to accommodate planned growth.

In summary, because the anticipated number of jobs is within projections by 2025 and would respond to local and regional demand, growth inducement effects would not be significant.

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CHAPTER 5

Alternatives to the Project

The California Environmental Quality Act (CEQA) requires an evaluation of the comparative effects of a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (CEQA *Guidelines* §15126.6[a]). The EIR is to consider a reasonable range of feasible alternatives that will foster informed decision-making and public participation. The nature and scope of the alternatives to be discussed is governed by the “rule of reason.” The discussion of alternatives is to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede, to some degree, the attainment of the project objectives, or would be more costly (CEQA *Guidelines* §15126.6[b]).

The EIR also must identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination (CEQA *Guidelines* §15126.6[c]). The EIR must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project (CEQA *Guidelines* §15126.6[d]). Evaluation of a No Project Alternative is required, to allow decision-makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. The No Project analysis must discuss existing conditions at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved (CEQA *Guidelines* §15126.6[e]).

This EIR considers three alternatives which were selected because of their feasibility, their ability to meet most of the basic objectives of the Project, their ability to avoid or lessen at least some of the significant effects of the Project, and because they provide a reasonable range of alternatives to the Project. The three alternatives are:

1. No Project
2. Reduced Development Alternative
3. Alternative Transportation Alternative

Below, each of these three alternatives is described and its potential environmental impacts and ability to meet basic Project objectives are compared with the proposed Project.

5.1 Alternatives Considered but Rejected

In addition to the three alternatives selected for this analysis, the Lead Agency considered several other possible alternatives. Upon consideration, however, these alternatives were rejected because of one of three reasons: the alternative failed to meet most of the basic Project objectives; the alternative was found to be infeasible; or the alternative did not have the ability to avoid the significant environmental impacts identified for the Project. These rejected alternatives are discussed briefly below, along with the specific reason that they were rejected.

Rejected Alternative 1: Alternative Site Alternative

Alternative sites in and around the City of Sunnyvale were considered for the Project. No other site was identified that provided the combination of appropriate size, good access, and availability. Given that the Project site and its surroundings exhibit few sensitive resources, and also the relatively few significant environmental impacts (for a development of this scale) identified in Chapters 3 and 4, it is unlikely that an alternative site would have the capability of reducing or avoiding any of the significant impacts of the Project. For these reasons, an alternative site was eliminated from further consideration in this Chapter.

Rejected Alternative 2: Alternative Development

Alternative types of development were considered, but rejected because they do not meet Project objectives. These include mixed use development, residential development, and commercial development. It is also noted that these types of development are inconsistent with Project site General Plan designation and zoning.

Rejected Alternative 3: Other Reduced Development Alternatives

Other reduced development alternatives were considered, in addition to the one selected. These were seen as unnecessary for presenting a reasonable range of alternatives, since the other alternatives already provide this reasonable range: the No Project Alternative would maintain the existing site development, which has a floor-to-area ratio (FAR) of 35%, the selected Reduced Development Alternative would have FAR of 75% (70% FAR as allowed under the current zoning, plus 5% FAR for a LEED Gold or Platinum project), and the Project as proposed would have a FAR of 100%.

5.2 Alternatives Considered in the EIR

Each alternative is described and evaluated below. The impacts associated with each alternative are compared to the Project's impacts in **Table 5-1**. The ability of each alternative to meet Project objectives is presented in **Table 5-2**, at the end of this section.

No Project Alternative

Alternative Description

The required No Project Alternative must examine the existing conditions and reasonably foreseeable future conditions that would exist if the Project were not approved (CEQA *Guidelines* §15126.6(e)).

Under the No Project Alternative, conditions at the Project site would be expected to remain largely the same as described in Chapter 2, Project Description and in the setting sections presented throughout Chapter 3. The existing buildings would not be demolished, and the existing light industrial and research and development uses would continue at the Project site.

Reduced Development Alternative

Alternative Description

The Reduced Development Alternative would limit the amount of development allowed within the Project Site. Specifically, this Alternative would re-zone the Project site not to M-S 100% (allowable FAR of 100%) as proposed, but rather to M-S 70% (allowable FAR of 70%, plus an additional 5% FAR for a LEED Gold or Platinum project). This would limit the occupiable floor space within the buildings to about 582,877 square feet (sf), or an increase of 324,600 above the existing development at the Project site. This would reduce the expected number of employees working in the new buildings from the anticipated 2,500 employees for the Project as proposed, to about 1,875, which would allow for the elimination of one occupied floor, thus reducing the development from four to three floors of occupied space, or a reduction in the footprint of the buildings. This would also reduce the need for parking, as the Project as proposed includes about one parking space for each anticipated employee. Under this Alternative, parking spaces would be reduced by 25%, from the proposed 2,541 to 1,906. Reducing the number of parking spaces would enable a substantial decrease in the size of the Proposed parking garage, or elimination of one of the podium parking levels from the buildings.

The smaller development allowed under this Alternative would enable a slightly shorter construction period, and reduced use of equipment and materials for construction. Once constructed, the development would generate fewer vehicle trips, which would also be reduced by about 25%, from the anticipated 5,234 trips per day for the Project as proposed to 3,925 trips per day. The existing development generates about 2,211 trips per day, so the net increase in daily vehicle trips under this Alternative would be 1,715 trips per day.

This Alternative was crafted specifically to reduce significant traffic impacts associated with the anticipated increase in daily vehicle trips. It would also reduce the already less-than-significant impacts of the Project as proposed on scenic views and visual character of the area, and could reduce construction-related noise impacts.

Alternative Transportation Alternative

Alternative Description

This Alternative emphasizes use of alternative, non-automobile transportation for employees of the proposed research and development campus. Alternative forms of transportation include walking, bicycling, use of car pools and vanpools, and use of mass transit. This Alternative does not limit occupiable floor space for the proposed buildings, but limits on-site parking. When combined with provision of non-automobile choices for transportation, limiting parking can be an effective means of encouraging employees to use alternative means of transportation. Specifically, this Alternative includes the following:

- Reduced parking spaces, from the proposed 2,541 (which represents 3.27 spaces per 1,000 sf of occupiable space), to 2,137 spaces (which represents 2.75 spaces per 1,000 sf of occupiable space).¹ This is a decrease of 404 spaces, or about 16%. As a consequence of reduced space allocated for parking, either the parking garage could be reduced in size from six stories to four or five, or some of the area dedicated to parking on the podium levels of the buildings could be eliminated, possibly resulting in a reduction in the height of the office buildings from six stories to five without reducing occupiable floor space.
- Implementation of the applicant's Travel Demand Management (TDM) Program (Fehr and Peers, 2013).² This Alternative uses a goal of meeting the requirements of Zoning Code Section 19.22.035(d) to generate no more traffic than a 70% FAR project, and combines the measures included in the applicant's TDM program with the reduction in parking spaces specified above. Measures included in the TDM Program include, but are not limited to, vanpool and bus service for employees; pricing incentives and disincentives including charging employees for parking and providing cash allowances for use of alternative transportation; availability of shared vehicles and bicycles; guaranteed ride home for employees who use transit and who may work late; shuttle service to Caltrain and regional transit hubs, including off-hour service. The complete list of measures included in the applicant's TDM Program is included in Appendix F.

5.3 Comparison of Alternatives with the Project

The following discussion provides a brief comparison of the likely environmental impacts of the three alternatives with those of the Project itself. Per CEQA *Guidelines* §15126.6(d), "The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." Thus, the analysis of alternatives need not be as exhaustive as that of the Project itself. The discussion below is organized by issue area, such as Air Quality and Biological Resources. For each issue area, a comparison is drawn between potential effects of the Project and those of the alternatives. This comparison is summarized in Table 5-1.

¹ The City of Sunnyvale Planning Code, Section 19.46.100, establishes a minimum of two spaces per 1,000 sf and maximum of four spaces per 1,000 sf for research and development and corporate office uses.

² The applicant's TDM Program has a goal of reducing peak-hour trip generation by 20%, but does not provide an analysis of how the selected measures will combine to achieve this goal, nor does it provide contingency measures or other implementation details that demonstrate a firm commitment to meeting this goal. The TDM Program does not establish a goal for overall trip reduction, only for peak-hour trip reduction.

**TABLE 5-1
COMPARISON OF IMPACTS: PROPOSED PROJECT AND ALTERNATIVES**

Impact	Proposed Project	No Project Alternative	Reduced Development Alternative	Alternative Transportation Alternative
Aesthetics	Less than Significant	No Impact	Less than Significant	Less than Significant
Air Quality	Significant but can be mitigated to less than significant	No Impact	Significant but can be mitigated to less than significant; less severe than Project as proposed	Significant but can be mitigated to less than significant; less severe than Project as proposed
Biological Resources	Significant but can be mitigated to less than significant	No Impact	Significant but can be mitigated to less than significant; less severe than Project as proposed	Significant but can be mitigated to less than significant; less severe than Project as proposed
Geology and Soils	Less than Significant	No Impact	Less than Significant	Less than Significant
Hydrology and Water Quality	Less than Significant	No Impact	Less than Significant	Less than Significant
Land Use and Planning	Less than Significant	No Impact	Less than Significant	Less than Significant
Noise	Significant and Unavoidable	No Impact	Significant and Unavoidable; potentially less severe than Project as proposed	Significant and Unavoidable; potentially less severe than Project as proposed
Hazards and Hazardous Materials	Less than Significant	No Impact	Less than Significant	Less than Significant
Public Services	Less than Significant	No Impact	Less than Significant	Less than Significant
Transportation and Traffic	Significant and Unavoidable ^a	No Impact	Significant and Unavoidable, ^a but less severe than Project as proposed	Significant and Unavoidable, ^a but less severe than Project as proposed
Utilities and Service System	Less than Significant	No Impact	Less than Significant	Less than Significant
Cultural Resources	Significant but can be mitigated to less than significant	No Impact	Significant but can be mitigated to less than significant; similar to Project as proposed	Significant but can be mitigated to less than significant; similar to Project as proposed
Greenhouse Gas Emissions	Less than Significant	No Impact	Less than Significant	Less than Significant
Mineral Resources	No Impact	No Impact	No Impact	No Impact
Agriculture and Forestry	No Impact	No Impact	No Impact	No Impact
Population and Housing	Less than Significant	No Impact	Less than Significant	Less than Significant
Cumulative Impacts	Significant and Unavoidable (cumulative Traffic impact) ^a	No Impact	Significant and Unavoidable (cumulative Traffic impact), ^a though less severe than Project as proposed	Significant and Unavoidable (cumulative Traffic impact), ^a though less severe than Project as proposed

NOTES:

^a Project Impacts TR-1, TR-2, and CUM-TR are stated in Section 3.7 and Chapter 4 as significant and unavoidable because it is not certain that mitigation measure TR-1 (reconstruct and reconfigure Commercial Street / Central Expressway intersection) could be implemented. The City of Sunnyvale, as lead agency, could not implement Measure TR-1 without the approval of Santa Clara County. However, in the event that Mitigation Measure TR-1 could be implemented, these impacts would be *less than significant*.

SOURCE: ESA

Comparison of Environmental Impacts

Land Use and Planning

As discussed in Section 3.1, the Project as proposed would not be expected to have any significant impacts on land use and planning. The No Project Alternative would not alter current use of the site, so would also have no impact on land use and planning. The Reduced Development Alternative would require rezoning of the site, but with rezoning, this Alternative would be consistent with land use policies, and no significant impact of this kind would be expected. The Alternative Transportation Alternative would require the same re-zoning as the Project as proposed, and would also have the same less-than-significant impacts.

Population and Housing

As discussed in Section 3.2, the Project as proposed would have only less-than-significant impacts on population and housing. The No Project Alternative would not change the demand for housing in the area or displace existing housing, and would have no impact on population. Both the Reduced Development Alternative and the Alternative Transportation Alternative would increase employment, and, like the Project as proposed, would increase population and the demand for housing regionally. As with the Project as proposed, however, and for the same reasons described in the discussion of Impact PH-1, this increase would result in only a less-than-significant impact.

Aesthetics

As discussed in Section 3.3, the Project as proposed would result in only less-than-significant impacts on aesthetics and scenic resources. The No Project Alternative would not alter the current use of the site, and so would have no impact on aesthetics or scenic resources. Both the Reduced Development Alternative and the Alternative Transportation Alternative would allow for reduced scale of the proposed buildings and/or parking garage, which would further reduce impacts on visual character of the Project site.

Traffic and Transportation

As discussed in Section 3.4, the Project as proposed would result in significant impacts to level-of-service at one intersection in the vicinity of the Project site (see Impact TR-1). The No Project Alternative would avoid these impacts, and would have no impact on traffic and transportation. Both the Reduced Development Alternative and the Alternative Transportation Alternative would reduce trip generation, compared to the Project as proposed, by 25% and 10%, respectively. This may be sufficient to avoid the significant impact on intersection level of service. Note, however, that if Mitigation Measure TR-1 (reconfiguration of the Commercial-Central Expressway intersection) were to be approved by Santa Clara County, this impact would also reduce the significant traffic impacts to less than significant. If warranted even with the reduced trip generation associated with the Alternative Transportation Alternative and the Reduced Development Alternative, and if approved by Santa Clara County, Mitigation Measure TR-1 would also reduce this impact to less than significant for these two alternatives.

Air Quality

Section 3.5, Air Quality, identifies significant impacts that, if mitigated, would be reduced to less than significant. The No Project Alternative would avoid these impacts, and would have no impact on air quality. Both the Reduced Development Alternative and the Alternative Transportation Alternative would reduce air emissions during Project operation related to vehicle use, since both would reduce trip generation; nevertheless, both would likely have a significant impact. Implementation of Mitigation Measure AIR-3 would reduce this impact to less than significant, both for the Project as proposed and for these two alternatives. Both of these alternatives would also involve somewhat smaller developments, so would reduce construction-related emissions incrementally; construction-related impacts would likely remain significant, requiring Mitigation Measures AIR-1a, 1b, and 1c to reduce them to less than significant.

Climate Change and Greenhouse Gas Emissions

The Project as proposed would result in less-than-significant impacts related to greenhouse gas emissions (GHG) and climate change, as discussed in Section 3.6. The No Project Alternative would have no impact of this kind, since it would not increase GHG emissions relative to existing conditions. Both the Reduced Development Alternative and the Alternative Transportation Alternative would incrementally reduce GHG emissions, relative to the Project, since both would reduce vehicle trip generation and also the size of the development.

Noise

As discussed in Section 3.7, the Project as proposed can be expected to result in a significant and unavoidable noise impact from pile driving during Project construction. While the smaller developments associated with both the Alternative Transportation Alternative and the Reduced Development Alternative may allow for some site reconfiguration that could set-back pile driving activities farther from sensitive receptors, the amount of setback would be unlikely to be enough to avoid the impact. Therefore, for these two alternatives, the construction noise impact would likely also be significant and unavoidable, albeit incrementally reduced in severity. Neither the Project as proposed nor these two alternatives would have other significant noise impacts. The No Project Alternative would have no impact on the existing noise environment.

Biological Resources

As described in Section 3.8, Biological Resources, the Project as proposed could, potentially, have significant impacts on biological resources, including disturbance of nesting birds and of roosting bats, and increased incidence of bird collisions. Similarly, both the Alternative Transportation Alternative and the Reduced Development Alternative could cause the same impacts, for the same reasons as discussed in Section 3.8. Implementation of the mitigation measures described in that section would reduce Project impacts to less than significant, and would also be effective in reducing the impacts of the alternatives to a less-than-significant level. The No Project Alternative would not be expected to cause any new or more severe impacts on Biological Resources.

Geology and Soils

Section 3.9, Geology and Soils, identifies only less-than-significant impacts of the Project as proposed. Because both the Alternative Transportation Alternative and the Reduced Development Alternative would be developed at the same site, the same site conditions would apply, and these two alternatives would be expected to have only the same, less-than-significant impacts as the Project.

The No Project Alternative would not alter existing conditions at the Project site and so would have no impact on geology and soils.

Hydrology and Water Quality

Section 3.10, Hydrology and Water Quality, identifies only less-than-significant impacts of the Project as proposed. Because both the Alternative Transportation Alternative and the Reduced Development Alternative would be developed at the same site, the same site conditions would apply, and these two alternatives would be expected to have only the same, less-than-significant impacts as the Project.

The No Project Alternative would not alter existing conditions at the Project site and so would have no impact on hydrology and water quality.

Hazards and Hazardous Materials

Section 3.11, Hazards and Hazardous materials, identifies only less-than-significant impacts of the Project as proposed. Because both the Alternative Transportation Alternative and the Reduced Development Alternative would be developed at the same site, the same site conditions would apply, and these two alternatives would be expected to have only the same, less-than-significant impacts as the Project.

The No Project Alternative would not alter existing conditions at the Project site and so would not cause a new or more severe impact related to hazards and hazardous materials.

Cultural Resources

As discussed in Section 3.12, Cultural Resources, the Project as proposed could have significant impacts related to the inadvertent discovery of archeological resources or human remains during Project construction. The mitigation measures specified in that section would reduce the impacts to less than significant. Both the Alternative Transportation Alternative and the Reduced Development Alternatives have the potential for the same significant impacts as the Project, though the mitigation measures specified in Section 3.12 would also be effective in reducing these impacts of the alternatives to less than significant.

Because the No Project Alternative does not involve ground disturbance, there is no potential for cultural resources impacts for this alternative.

Utilities and Service Systems

The Project as Proposed would have only less-than-significant impacts on utilities and services systems, as discussed in Section 3.13. Both the Reduced Development Alternative and the Alternative Transportation Alternative would involve somewhat smaller developments, though in the same location as the Project, and with the same utility connections. Assuming that site engineering and building features, such as use of recycled water, would be employed with either of these alternatives, the alternatives would also be expected to have only less-than-significant impacts on utilities and service systems.

The No Project Alternative would not alter the existing provisions of utilities and services to the Project site, and so would have no impact on utilities and service systems.

Public Services

As discussed in Section 3.14, the Project as proposed would have only less-than-significant impacts on public services, including public parks and recreational facilities. Both the Reduced Development Alternative and the Alternative Transportation Alternative would involve somewhat smaller developments, though in the same location as the Project. They would be expected to have an incrementally lesser, and therefore also less-than-significant, impact on public services.

The No Project Alternative would not increase or decrease the existing demand for public services, and so would have no impact of this kind.

Cumulative and Growth Inducing Impacts

Two significant cumulative impacts are associated with the Project, as discussed in Chapter 4: a cumulative but mitigable biological resources impact related to effects of nitrogen deposition on sensitive habitats; and a cumulative noise impact from pile driving during Project construction. The latter impact is significant and unavoidable. The No Project Alternative would avoid both of these impacts. Both the Alternative Transportation Alternative and the Reduced Development Alternative would reduce air emissions and may allow for a greater set-back of pile-driving activity from the property boundary, thus reducing noise effects on nearby sensitive receptors; therefore, the cumulative impacts of both of these alternatives would be reduced, relative to the Project as proposed. The impacts would still, however, likely be significant, and, in the case of the cumulative noise impact, unavoidable.

Ability of Alternatives to Meet Project Objectives

The ability of each alternative to meet Project objectives is shown in Table 5-2. As shown in the table, the Project as proposed, as well as the Alternative Transportation Alternative and the Reduced Development Alternative, all appear to have the ability to meet, or at least partially meet, the Project applicant's objectives. The No Project Alternative fails to meet most of the Project objectives, and meets two only partially.

**TABLE 5-2
ABILITY OF ALTERNATIVES TO SATISFY PROJECT OBJECTIVES**

Project Objective	Project	No Project Alternative	Reduced Development Alternative	Alternative Transportation Alternative
Replace the existing underutilized and outdated concrete tilt-up structures with a superior, architecturally significant technology campus that may include office, R&D, lab, test, light manufacturing, biotech, life sciences and other related technology uses, high quality pedestrian and bicycle paths, transit connections, abundant open space and landscaping, abundant on-site amenities and various features to promote enhanced sustainability.	Meets Objective	Does not meet Objective	Meets Objective	Meets Objective
Develop a Class A, headquarter-style campus of sufficient size and sufficient quality that will attract and accommodate large scaled leading edge technology tenants. Typical components include attractive site configurations, large floor plates, ample on-site amenities, on-site parking, and efficient employee collaboration space.	Meets Objective	Does not meet Objective	Partially Meets Objective	Meets Objective
Develop a project that is compatible with the land uses in the surrounding area and with the local transportation system.	Meets Objective	Partially meets Objective	Meets Objective	Meets Objective
Construct an environmentally focused campus that will be LEED Platinum certified.	Meets Objective	Does not meet Objective	Meets Objective	Meets Objective
Develop a bicycle and pedestrian focused project that is well connected to the road network and public transportation system, including Caltrain, and that maximizes the use of transportation demand management program components and activities to minimize the use of single occupant motor vehicles.	Meets Objective	Does not meet Objective	Meets Objective	Meets Objective
Enhance the appearance, streetscape and visual quality of this site by incorporating high quality finishes, varied façade treatments, public art, a highly integrated campus circulation system and open spaces with landscape features, and landscaped streetscapes along adjacent arterial streets.	Meets Objective	Does not meet Objective	Meets Objective	Meets Objective
Develop a project of a sufficient density and a superior quality that is economically feasible, and that will easily attract investment capital and construction financing.	Meets Objective	Does not meet Objective	Partially Meets Objective	Meets Objective
Develop a project that provides short-term and long-term employment opportunities.	Meets Objective	Partially meets Objective	Meets Objective	Meets Objective

SOURCES: Landbank, LLC; ESA

Environmentally Superior Alternative

Of the alternatives assessed in this EIR, the alternative with the least environmental impact is the No Project Alternative. This alternative would avoid all significant environmental impacts that would occur under the proposed Project. The No Project Alternative would not, however, fully meet any of the Project objectives and would meet two only partially. Section 15126(e)(2) of the CEQA *Guidelines* states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Among the other alternatives, the Alternative Transportation Alternative would reduce several impacts related to traffic, including intersection level of service, air quality, and cumulative biological resources impacts. While this alternative does not appear capable of avoiding the significant avoidable impacts of the Project as proposed, it would reduce the severity of impacts and make mitigation of significant impacts simpler. Therefore, the Alternative Transportation Alternative is considered to be the environmentally superior alternative. Note, however, that this alternative would, from an environmental perspective, be only marginally superior to the Project as proposed.

References

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CHAPTER 6

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