Draft Environmental Impact Report



The Crescent-Lakeside Specific Plan

General Plan Amendment and Planned Development Rezoning

SCH# 2005022089

Sunnyvale, California June 2005

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PREFACE

This document has been prepared by the City of Sunnyvale as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The purpose of this Environmental Impact Report (EIR) is to inform decision makers and the general public of the environmental effects of a proposed project.

This document provides both a program level and project level environmental review appropriate for the Crescent-Lakeside Specific Plan project, in accordance with CEQA Guidelines Sections 15121, 15146, and 15151.

In accordance with CEQA, an EIR provides objective information regarding the environmental consequences of the proposed project, both to the decision makers who will be considering and reviewing the proposed project, and to the general public.

The following guidelines are included in CEQA to clarify the role of an EIR:

Section 15121(a). Informational Document. An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.

Section 15145. Speculation. If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impacts.

Section 15146. Degree of Specificity. The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

- (a) An EIR on a construction project will necessarily be more detailed in the specific effects of a project than will an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.
- (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

Section 15151. Standards for Adequacy of an EIR. An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

In accordance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was circulated to the public and responsible agencies for input regarding the analysis in this EIR. This EIR addresses those issues which were raised by the public and responsible agencies in response to the NOP. The NOP and the public responses to the NOP are presented in Appendix A of this EIR.

This EIR, and all documents referenced in it, are available for public review at the Planning Division of the Community Development Department, located at 456 West Olive Avenue, Sunnyvale, California, on weekdays during normal business hours.

SUMMARY

The project proposes a General Plan Amendment (GPA) and a specific development project. The GPA would change the land use designation on the site from *Industrial* to *Specific Plan* and increase the allowable building height to a maximum of 80 feet on the entire site. The proposed *Specific Plan* and specific development project would allow for the development of a new hotel and residential units on the site.

The project site is 8.83 acres and is currently developed with a 378-room hotel. The project proposes to demolish the existing hotel and redevelop the site with a new, high-end hotel and condominiums. The following is a **brief summary** of project impacts and mitigation measures. The reader is referred to the main body text of the EIR for detailed discussions for the existing setting, impacts, and mitigation measures.

Summary of Impacts and Mitigation Measures

The following table summarizes the significant environmental impacts identified and discussed within the text of the EIR, and identifies the mitigation measures proposed to avoid or reduce those impacts. Alternatives to the proposed project are also summarized at the end of the table.

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	
NOISE		
IMPACT NOISE-2: Use of additional mechanical equipment may increase noise levels above normally acceptable levels, as defined by the City of Sunnyvale and municipal code standards (Municipal Code Section 19.42.030).	Conformance with applicable General Plan policies and actions and the implementation of the following proposed mitigation measures will reduce noise impacts to a less than significant level:	
Significant Impact	MITIGATION MEASURE NOISE-1: Select and locate mechanical equipment to meet City noise standards. If necessary, employ enclosures, acoustical louvers, and/or equipment noise attenuators.	
	MITIGATION MEASURE NOISE-2: Control noise from building mechanical systems, through acoustical louvers or baffles in air transmission paths, parapet walls, rooftop screen walls, and sound attenuators, so that it does not exceed 60 dBA at any residential property boundary.	
	MITIGATION MEASURE NOISE-3: Noise control measures included in the building mechanical systems will be reviewed and measurements will be made during the design phase by a qualified acoustical specialist to verify	

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES
	that noise impacts have been mitigated. The acoustical specialist will prepare a report for submittal to the City demonstrating that necessary treatments have been included in the design prior to issuance of a building permit.
	Less Than Significant Impact with Mitigation
IMPACT NOISE-3: The proposed project would result in short-term increase in noise levels in the project area, especially during grading, below grade work, and pile driving. Significant Impact	Conformance with applicable General Plan policies and actions and the implementation of the following proposed mitigation measures will reduce noise impacts to a less than significant level:
	MITIGATION MEASURE NOISE-4: Post signs at the construction site that include permitted construction days and hours, a day and evening contact number for the job site and day and evening contact number for the City in the event of problems.
	<u>MITIGATION MEASURE NOISE-5</u> : Notify neighbors of the schedule and type of equipment that would be used for each phase of construction.
	MITIGATION MEASURE NOISE-6: Limit construction hours to between 7:00 AM and 6:00 PM on weekdays, and between 8:00 AM and 5:00 PM on Saturdays.
	MITIGATION MEASURE NOISE-7 : Locate noisy stationary equipment (e.g., generators and compressors) away from the most sensitive adjacent uses.
	MITIGATION MEASURE NOISE-8 : Require that all construction equipment be in good working order and that mufflers are inspected for proper functioning.
	MITIGATION MEASURE NOISE-9: Designate a construction noise coordinator. This coordinator shall be available to respond to complaints from neighbors and take appropriate measures to reduce noise.

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES
	MITIGATION MEASURE NOISE-10: If pile driving is required, implementation of site- specific noise and vibration attenuation measures under the supervision of a qualified acoustical consultant such as the following measures will be required prior to pile driving:
	 Multiple pile drivers shall be considered to expedite this phase of project construction. Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced. Temporary noise control blanket barriers shall shroud pile drivers. Such noise control blanket barriers can be rented and quickly erected. The contractor shall pre-drill pile holes to minimize the number of blows required to seat the pile for all piles driven within 200 feet of sensitive land uses. Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the soil conditions of the site. The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance. Notify land uses located within 200 feet of pile driving activities of the construction schedule in writing.
	Less Than Significant Impact with Mitigation
IMPACT NOISE-4: The proposed project would be exposed to noise levels above the City's exterior noise goal of 60 dB L_{dn} and the interior noise goal of 45 dB L_{dn} .	Conformance with applicable General Plan policies and actions and the implementation of the following proposed mitigation measures will reduce noise impacts to a less than significant level:
Significant Impact	

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES
	MITIGATION MEASURE NOISE-11: Construct a 10- to 15-foot sound barrier wall located along US 101 so as to block the line of sight from the pool area to vehicles on the freeway and reduce outdoor noise levels at the outdoor podium recreation area to meet the City's noise goal of 60 dB or less (refer to Figure 14).
	The exact height, location, extent of a sound barrier wall should be determined during the design phase, when the site plan has been finalized. The barrier wall should be constructed of concrete block, plaster, pre-cast concrete, or other solid material with a minimum surface density of three pounds per square foot. Construction of a sound barrier wall along the US 101 right-of-way will be subject to design review and approval by the California Department of Transportation (Caltrans).
	$\frac{\text{MITIGATION MEASURE NOISE-12: Install}{\text{sound rated windows and exterior wall assemblies}}{\text{to reduce interior noise levels to an L}_{dn} of 45}{\text{dBA. Throughout most of the site, window sound}}{\text{insulation ratings between Sound Transmission}}{\text{Class (STC) 30 and STC 36 would be required.}}{\text{These ratings can be achieved using well sealed}}{\text{dual pane windows with various glazing}}{\text{configurations.}}$
	Buildings with the greatest exposure to noise from US 101 may require windows with sound insulation ratings of approximately STC 40, depending on the size and shape of windows and rooms. Windows with sound insulation ratings of STC 40 and greater typically have either dual sashes, or large airspaces between panes.
	MITIGATION MEASURE NOISE-13: Complete a detailed analysis during the design- level of the project to select appropriate windows and wall assemblies to meet interior noise standards. Sound rated exterior walls incorporating either resilient channels or double stud assemblies may also be required at the facades with the greatest noise exposure.
	Less Than Significant Impact with Mitigation

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES
AIR QU	JALITY
	MEASURES
	MITIGATION MEASURE AIR-7: Replant vegetation in disturbed areas as quickly as possible.
	<u>MITIGATION MEASURE AIR-8</u> : Address dust or complaints regarding dust within 24 hours to the satisfaction of City staff (or other authority).
	Less Than Significant Impact with Mitigation

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	
BIOLOGICAL RESOURCES		
IMPACT BIO-1: Construction activities during the nesting season may result in the disturbance or destruction of breeding raptors or their nests.	Implementation of the following proposed mitigation measure will reduce impacts to raptors to a less than significant level:	
Significant Impact	MITIGATION MEASURE BIO-1: Preconstruction surveys shall be conducted no more than 30 days prior to the start of site grading. If nesting raptors are located on or immediately adjacent to the site, a construction- free buffer zone (typically 250 feet) around the active nest shall be established for the duration of breeding until young birds have fledged. Less Than Significant Impact with Mitigation	
	Less Than Significant Impact with Witigation	
IMPACT BIO-2: The proposed Specific Plan could result in the removal of up to 189 trees, 77 of which are of significant size.	Implementation of the following proposed mitigation measures will reduce impacts to trees to a less than significant level:	
Significant Impact	MITIGATION MEASURE BIO-2: The project shall conform to the City's Tree Preservation Ordinance (Municipal Code, Chapter 19.94). At the discretion of the Director of Community Development, significant trees that are to be removed shall be replaced, replanted, or relocated (Municipal Code, Sections 19.94.080, 19.94.090, and 19.94.100).	
	MITIGATION MEASURE BIO-3: A tree protection plan shall be completed. The plan shall demonstrate how tree protection shall be provided during and after construction and shall include any of the protective measures set forth in Section 19.94.120 of the Municipal Code. Less Than Significant Impact with Mitigation	
	g	

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES		
CULTURAL RESOURCES			
 <u>IMPACT CULT-1</u>: Development of the project site could result in a significant impact to buried cultural resources which could be present on the site. Significant Impact 	Implementation of the following proposed mitigation measure will reduce impacts to cultural resources to a less than significant level: <u>MITIGATION MEASURE CULT-1:</u> In the event of the discovery of unanticipated prehistoric or historic era cultural materials, operations shall stop within 25 feet of the find and the Community Development Director will be notified. The find shall be evaluated by a qualified archaeologist, and if the find is significant, treatment recommendations shall be developed.		
	Less Than Significant Impact with Mitigation		
	AND SOILS		
IMPACT GEO-3: There is potential for liquefaction and differential compaction to occur on the site.	Implementation of the following proposed mitigation measure will reduce geologic impacts to a less than significant level:		
Significant Impact	 MITIGATION MEASURE GEO-1: A detailed design-level geotechnical investigation shall be completed and the project design and construction shall follow the recommendations of the investigation. The design-level investigation shall include subsurface exploration at the site (to address the liquefaction potential at the site) and evaluation of appropriate foundation systems for proposed structures, as well as site preparation and pavement design. Due to the depth of groundwater in the project area, the investigation will also address any need for dewatering during construction. If dewatering is required, this report will also identify the amount and depth of dewater. Less Than Significant Impact with Mitigation 		

MITIGATION AND AVOIDANCE MEASURES

<u>IMPACT HAZ-1</u> : Concentrations of chlordane	MITIGATION MEASURE HAZ-1: The		
were detected in on-soils above residential ESLs.	project applicant shall present the soil sampling		
	results to the Santa Clara County Department of		
Significant Impact	Environmental Health prior to issuance of the		
	demolition permit. The Santa Clara County		
	Department of Environmental Health shall		
	determine whether remediation is required to		
	address chlordane in soils on the site. All		
	requirements of the Santa Clara County		
	Department of Environmental Health shall be		
	followed, and any remediation of chlordane shall		
	be completed in accordance with all overseeing		
	regulatory agency requirements and all federal,		
	state, and local regulations.		
	If soil remediation is needed, it would likely		
	consist of soil excavation, soil mixing, and/or		
	capping of the soil with non-contaminated soil.		
	Remediation, if any, shall be performed by a		
	licensed hazardous waste remediation contractor		
	under the oversight of a professional engineer or		
	registered geologist.		
	Less Than Significant Impact with Mitigation		
UTILITIES AND SERVICE SYSTEMS			
IMPACT UTIL-2 : The proposed project will	MITIGATION MEASURE UTIL-3: The		
increase sewage flow from the site and may	project shall test the capacity of the existing sewer		
exceed the capacity of the existing sewer main.	facilities that serve the project site prior to		
	issuance of the site development permit. If it is		
Significant Impact	determined that the proposed project would		
	exceed the capacity of the existing sewer lines at		
	or downstream of the site, the project shall		
	upgrade the sewer lines and connections to		
	provide capacity to serve the project and to meet		
	the City's standard of operating at 75 percent or		
	less of sewer line capacity.		
	Loss Than Significant Impact with Mitigation		
	Less Than Significant Impact with Mitigation		

HAZARDS AND HAZARDOUS MATERIALS

SIGNIFICANT UNAVOIDABLE IMPACTS

The proposed project would not result in any significant or unavoidable environmental impacts. All impacts of the proposed project would be mitigated to a less than significant level with incorporation of applicable General Plan policies and actions and the project-specific mitigation measures identified in this EIR.

SUMMARY OF ALTERNATIVES

CEQA requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines specify that an EIR identify alternatives which "would feasibly attain the most basic objectives of the project but avoid or substantially lessen many of the significant environmental effects of the project," or in the case of the proposed project, would further reduce impacts that are considered less than significant with the incorporation of identified mitigation.

1. NO PROJECT ALTERNATIVE

The Guidelines specifically require consideration of a "No Project" Alternative. Since the project site is currently developed with an existing hotel, the "No Project" Alternative would likely include the continued operation of that hotel, potentially at full occupancy/capacity or potentially at a lesser capacity.¹ Given the age and condition of the existing hotel, if the General Plan land use designation and zoning were to remain the same, it is likely that the current or future owners will wish to upgrade the existing hotel.

Under the current General Plan and zoning designation, the site could be redeveloped with a building or buildings totaling up to 153,854 square feet, with a maximum allowed building height of 75 feet (eight stories).

The No Project Alternative would avoid the less than significant visual, noise, air quality, and biological impacts of the project. While the No Project Alternative could avoid or substantially reduce the identified environmental impacts of the proposed project, it would not meet the main project objectives of upgrading the aging hotel and providing residential uses on an infill site within the City of Sunnyvale.

2. REDUCED SCALE ALTERNATIVE

A Reduced Scale Alternative to the project would involve development of the proposed new hotel and residential units at a lower maximum height in order to reduce the less than significant visual impacts of the project. The Specific Plan project proposes a maximum height of 80 feet. This alternative assumes a maximum building height of 68 feet, to be consistent with the adjacent Avalon apartment complex, and this alternative also assumes that the layout and size of the buildings is similar to the proposed project. With this lower maximum height, it is assumed that two floors would be lost for the proposed hotel development and one floor would be lost for the proposed residential development.

¹ According to the applicant, the existing hotel has operated at roughly 55 percent of capacity for the last three years. Source: Green, Kim. "Re: Info needed for 2nd AdDraft." E-mail to David J. Powers and Associates from Steinberg Architects. 9 May 2005.

For the proposed hotel development, assuming that there are 38 rooms per floor, the Reduced Scale Alternative would result in the loss of approximately 76 rooms.² For the proposed residential development, assuming that there are 10 units per floor and the layout of the project is the same (i.e., four condominium buildings), the Reduced Scale Alternative would result in the loss of approximately 40 units.³

Overall, the Reduced Development Alternative would be environmentally superior to the proposed project, because it would further reduce the project's less than significant visual impact. If fewer units were built, the project's less than significant traffic and air quality impacts would also be reduced. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project.

3. DESIGN ALTERNATIVE

In order to avoid or further reduce the less than significant impacts to the project from ambient noise levels at the site, a Design Alternative to the project would involve re-orientation of the residential buildings to shield the proposed outdoor recreational area from traffic noise from US 101. This alternative assumes that the same type and number of residential units could be built on the site.

Overall, the Design Alternative would be environmentally superior to the proposed project, because it would further reduce the noise impacts upon the project. This alternative could result in greater visual and aesthetic impacts than the proposed project design. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project. Because this alternative would allow for the same amount of residential and hotel development on the site, this alterative would generally be consistent with the project objectives.

4. REDUCED HEIGHT AND DESIGN ALTERNATIVE

In order to avoid the both the visual/aesthetic impacts from the project as well as the impacts to the project from high ambient noise levels at the site, another alternative would be a combination of the prior two alternatives. This alternative would involve a lower overall building height as well as reorientation of the residential buildings to shield the proposed outdoor recreational area from traffic noise from US 101. This alternative assumes that the same reduction in the number of residential units as Alternative B above.

Overall, the Reduced Height and Design Alternative would be environmentally superior to the proposed project, because it would further reduce the project's significant visual and noise impacts. However, depending on the exact building orientation, this alternative could actually result in a greater visual presence than the proposed project design. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project.

This alternative would be less consistent than the proposed project with the project objectives. If the amount of development allowed under this alternative would not generate sufficient revenue to meet

² Green, Kim. "Re: Crescent Unit Count." E-mail to David J. Powers and Associates, Inc. from Steinberg Architects. 6 June, 2005.

³ Green, Kim. "Re: Crescent Unit Count." E-mail to David J. Powers and Associates, Inc. from Steinberg Architects. 6 June, 2005.

the applicant's objectives for redeveloping the site, this alternative might not be economically feasible.

5. ALTERNATIVE LAND USE

Another alternative to the proposed project would be to develop the project site with an alternative land use, such as an industrial use. This alternative would allow for a mix of light industrial uses, such as research and development, product assembly, warehousing, and heavy industrial uses, such as, milling, refining, and processing of bulk raw materials on the site. However, this alternative would not allow for any residential uses or a new hotel on the site.

The Alternative Land Use would avoid the project's visual and aesthetic and noise impacts. Other impacts would be similar to the proposed project. However, because this alternative would not allow for residential uses on the site, this alternative does not meet the project objectives, which include developing a new, high-end hotel and an economically viable, high-quality residential development in Sunnyvale.

6. ALTERNATIVE LOCATION

The CEQA Guidelines require that an EIR identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project" [\$15126.6 (f) (2) (A)]. For the proposed project, the alternative location should further reduce less than significant impacts.

The project is proposing a new hotel with up to 263 rooms and up to 251 new residential units on the approximately 8.83-acre site. An alternative site would need to be at least of comparable size, within the existing urbanized area of Sunnyvale, and with adequate visibility, roadway access, and utility capacity to serve the development proposed. Since the proposed project site is an older industrial site, with an existing hotel, an appropriate alternative site might also be a developed property.

Four possible alternative sites for the proposed development were identified. They include:

- 1217 Wildwood Avenue
- 1030 Duane Avenue
- 962 East Duane Avenue
- 560 Britton Avenue

All of the alternative sites would probably have a slightly greater visual impact than that of the proposed project. Development of the proposed project at the Wildwood site would probably result in similar noise impacts to the project because this alternative site is also subject to traffic noise from US 101 as is the project site. The development of the project at the other alternative sites would probably have lesser noise impacts than the project site.

In addition, the overall construction impacts related to clearing and grading operations, such as shortterm noise, dust and water quality impacts, would be comparable to those from the proposed project. The alternative locations could potentially avoid the less than significant impacts due to the presence of hazardous materials.

Because the alternative locations would involve property not currently under control by the applicant, the alternative locations would not meet the project's objectives of redeveloping their own property. For this reason, the alternative locations are not considered feasible.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussion, the environmentally superior alternative is the No Project Alternative, because all of the project's significant environmental impacts would be avoided. However, Section 15126.6(e)(2) 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."

Based upon the previous discussion, the Reduced Height and Design Alternative would be the environmentally superior alternative, because this alternative would further reduce the less than significant visual and aesthetic, noise, and utility and service system impacts of the proposed project. However, this alternative would not fully meet the project's objectives.

KNOWN VIEWS OF LOCAL GROUPS AND AREAS OF CONTROVERSY

Issues raised by residents of Sunnyvale, including the Lakewood Village Neighborhood Association, Lake Association, and San Miguel Neighborhood Association, and the Sunnyvale School District have included concerns related to the timing of project construction.

1. DESCRIPTION OF THE PROJECT

1.1 BACKGROUND AND OVERVIEW OF THE PROJECT

The project site is currently developed with a 378-room hotel, landscaping, and surface parking lots. The existing hotel complex was constructed in 1979 and is dated in terms of its architecture and site design. The applicant is proposing to redevelop the site in order to provide residential uses and to remain competitive with the growing number of higher-end hotels in the surrounding area.

The 8.83-acre project site is currently designated *Industrial* in the City of Sunnyvale's General Plan and is zoned *M-S* (*Industrial and Service*). The proposed project consists of two components: 1) a General Plan amendment to change the land use and zoning on the site to *Specific Plan* and 2) a specific development project. The proposed project would allow for the demolition of the existing hotel and redevelopment of the site with a residential development and a new hotel that includes auxiliary commercial/retail uses.

1.2 PROJECT LOCATION

The 8.83-acre project site is located at 1250 Lakeside Drive in the City of Sunnyvale and consists of two parcels (Assessor Parcel Numbers: 216-43-035 and 216-43-036). The project site is located south of US Highway 101 (US 101) and east of Lawrence Expressway. Surrounding land uses include an extended stay hotel to the east of the project site, a man-made lake and office buildings to the south, apartments to the west, and US 101 and a frontage road to the north of the project site. A regional map, vicinity map, and aerial photograph of the project site are shown on Figures 1, 2, and 3, respectively.

Link to Figure 1 Regional Map

Link to Figure 2 Vicinity Map

Link to Figure 3 Aerial Photograph

1.3 PROJECT DESCRIPTION

The 8.83-acre project site consists of two parcels (Assessor Parcel Numbers: 216-43-035 and 216-43-036). The site is currently designated *Industrial* in the City of Sunnyvale's General Plan and is zoned *M-S* (*Industrial and Service*). The proposed project consists of two components: 1) a General Plan amendment to change the land use on the site to *Specific Plan* and 2) a specific development project. These two components are further described below.

1.3.1 General Plan Amendment

The project proposes to amend the City's General Plan Land Use Map to change the land use designation on the site from *Industrial* to *Specific Plan* in order to allow for redevelopment of the site. The main goal of the proposed Specific Plan is to develop the project site with a mixed-use hotel and residential development. Under the proposed Specific Plan, the existing hotel would be demolished and replaced with a new hotel and a residential development.

The new hotel would have a minimum of 237 guest rooms, with a maximum of 263 guest rooms, and a minimum of 2,000 gross square feet of specific commercial/retail uses (as outlined in Appendix B), with a maximum of 3,000 gross square feet. The residential development would have a minimum of 188 units, with a maximum of 251 units. The proposed Specific Plan would allow for a maximum building height of up to 80 feet on the site. The Specific Plan is included as Appendix B of this EIR.

1.3.2 Specific Development Project

The proposed specific development project consists of two parts: a new hotel and residential development. The project would require demolition of the existing hotel on the site. The hotel is proposed on the western portion of the site and residential development is proposed on the eastern portion of the site (refer to Figure 4). As part of the project, the site would be subdivided into two parcels. The hotel and residential development are described in more detail below:

Hotel

The proposed hotel would be approximately 149,865 square feet in size and 78 feet in height and would cover the western portion of the site. The hotel would be eight stories and have 253 rooms. The hotel would include approximately 12,000 square feet of meeting rooms, including a wedding venue and restaurant. The project also includes up to 3,000 square feet of "convenience" retail that would primarily serve the proposed hotel and residential development. This retail would be located on the ground floor of the hotel and have internal and external entryways. Parking for the hotel would be provided by a two-tiered parking structure with two levels above ground, approximately 20 feet in height, which would be located along the western boundary of the site, and surface parking lots (refer to Figures 4-7).

Access to the proposed hotel would be provided via two driveways located on Lakeside Drive. A turn around and short-term parking would be located near the lobby entrance (refer to Figure 4).

Link to Figure 4 Conceptual Site Plan

Link to Figure 5 Locations of Conceptual Profile View and Cross Sections

Link to Figure 6 Locations of Conceptual Profile View and Cross Sections

Link to Figure 7A Conceptual Cross Sections

Link to Figure 7B Conceptual Cross Sections

Link to Figure 7C Conceptual Cross Sections

Residential Development

The proposed residential development would be located on the eastern portion of the project site and would consist of four condominium buildings, totaling approximately 279,000 square feet (refer to Figure 4). The four buildings would be seven stories (approximately 75 feet) tall and each building would contain between 60 and 70 units, for a total of 241 units (refer to Figure 7A). The residences would range from one to three bedroom units. A breakdown of the proposed residential units is provided in Table 1. The four buildings would be situated around a 1.63-acre common landscaped and recreation podium that would cover the middle of the site at approximately 12 feet above grade. The landscape podium would include a pool, recreation area, and associated amenities (refer to Figure 8). The outer walls of the podium may include solid walls, clear vision panels below railing and landscaping, including hanging plants along the perimeter. Parking for the residential development would be located at grade, below the landscape podium (refer to Figure 7C). Additional parking for the residential development would be provided by a two-tiered parking structure, located along the northern boundary of the site, and surface parking lots (refer to Figure 4, 7A, and 7B).

Table 1 Unit Breakdown of Proposed Residential Development			
Unit Type	# Proposed	Average Square Footage	
1 Bedroom	40	650 to 750	
1 Bedroom + Den	46	800 to 850	
2 Bedroom	51	1,000 to 1,100	
2 Bedroom + Den	48	1,100+	
3 Bedroom	48	1,300+	
3 Bedroom Penthouse	4	2,010	
Townhouse	4	1,400	
Total	241		

Parking

The project would be required to provide parking in accordance with the City's parking standards (Municipal Code Section 19.46.050). As mentioned above, parking for the hotel will be provided in a two-tiered parking structure along the western edge of the site. This parking structure would be three levels in height and provide 218 parking spaces. The surface parking lots would provide 62 parking spaces.

Parking for the residential development will be located at grade, under the buildings and a landscape podium. This parking garage would provide 246 parking spaces. Additional parking for the residential development would be provided by another two-tiered parking structure located along the northern boundary of the site and surface parking lots. The parking structure would provide a total of 111 parking spaces and the surface parking lots would provide 97 parking spaces.

The project would provide a total of 732 parking spaces. The proposed parking facilities and breakdown of the parking spaces are shown on Figure 9.

Link to Figure 8 Landscape Podium

Link to Figure 9 Grade Level Parking Plan

Landscaping

The proposed project includes new landscaping and trees throughout the project site (refer to Appendix B of this EIR). The specific development project includes planting trees, such as citrus trees, crape myrtle, and redwoods, various sized shrubs, hedges, and groundcover.

Utility Improvements

The project includes the installation of new domestic water lines, fire protection water lines, sanitary sewer lines and manholes, storm drain lines, and catch basins throughout the site to serve the proposed project.

1.4 OBJECTIVES OF THE PROJECT

The project proposes to demolish the existing, outdated hotel on the 8.83-acre project site and develop a new hotel and residential units. The objectives of the project are to increase the value of the property by developing a high-end hotel that includes current amenities and providing housing. The proposed hotel would include updated accommodations for conferences, meetings, and weddings, which would allow the hotel to remain competitive with existing, higher-end hotels in the area. The proposed residential development would help meet the need for multi-family housing in Sunnyvale.

1.5 USES OF THE EIR

This EIR will provide decision makers in the City of Sunnyvale and the general public with relevant environmental information to use in considering the proposed project. It is proposed that this EIR be used for appropriate project-specific discretionary approvals necessary to implement the project, as proposed. These discretionary actions include the following:

- General Plan Amendment
- A Planned Development Rezoning and Adoption of the Specific Plan
- Special Development Permit
- Storm Water Pollution Prevention Plan
- Tentative Map Permit

1.6 CONSISTENCY WITH RELEVANT PLANS AND POLICIES

In conformance with Section 15125(d) of the CEQA guidelines, this section of the EIR discusses how the project complies with existing, relevant regional plans and policies, the City's General Plan, and applicable plans and policies.

1.6.1 <u>Regional Plans</u>

Bay Area 2000 Clean Air Plan

The 1982 *Bay Area Air Quality Plan* and 2000 *Clean Air Plan* (CAP) established regional policies and guidelines to meet the requirements of the Clean Air Act, as amended through

1990. The Bay Area is a non-attainment area for ozone and particulate matter (PM_{10}), since federal standards are exceeded for these pollutants.⁴

The CAP includes measures and improvements to help the Bay Area comply with the state's ozone standard, and is the current regional strategy for improving air quality. The CAP proposes the adoption of transportation, mobile source, and stationary source controls on a variety of pollutant sources to offset population growth and provide improvement in air quality.

The consistency of the proposed project with the CAP is primarily a question of consistency with population/employment assumptions that were utilized in developing the CAP. The CAP was based on the City's General Plan in effect at the time the CAP was approved and the Association of Bay Area Governments (ABAG) *Projections '98*.

Consistency: The project proposes to amend the General Plan to allow for the development of a new hotel and residential development. The proposed project would allow for an increase in the residential holding capacity allowed under build-out of the General Plan and, thus, would increase population. The proposed project would also intensify the use of the project site, therefore, generating more traffic trips to and from the project site. The development of residential uses in Sunnyvale, however, would be consistent with CAP goals and policies, because it would reduce commute travel time and distances. Since the incommute of vehicles traveling to jobs in Sunnyvale from residences in distant locations contributes to the regional air quality problems, placing dwelling units in Sunnyvale would be expected to result in incremental benefits to regional air quality. Although there is no assurance that the residents on this site would move here from more distant locations, providing the opportunity for them to do so is consistent with CAP policies.

San Francisco Bay Region Water Quality Control Plan

The Regional Water Quality Control Board (RWQCB) has developed and adopted a Water Quality Control Plan (the Plan) for the San Francisco Bay region. The Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulations in the San Francisco Bay region. The Regional Board first adopted a water quality control plan in 1975 and the last major revision was adopted in 1995.

The Plan provides a program of actions designed to preserve and enhance water quality and to protect beneficial uses based upon the requirements of the Porter-Cologne Act. It meets the requirements of the U.S. Environmental Protection Agency (USEPA) and establishes conditions related to discharges that must be met at all times.

The implementation portion of the Plan includes descriptions of specific actions to be taken by local public entities and industries to comply with the policies and objectives of the Plan. These include measures for urban runoff management and agricultural wastewater management. As of June 2002, the Plan also includes an amendment which requires the identification of Total Maximum Daily Loads (TMDLs) for each water-body within the

⁴ State of California. <u>2004 Area Designations for State Ambient Air Quality Standards OZONE</u>. Map. 18 October 2003. California Air Resources Board. 21 April 2005. <u>http://www.arb.ca.gov/desig/adm/adm.htm</u>. State of California. <u>2004 Area Designations for State Ambient Air Quality Standards PM10</u>. Map. 18 October 2003. California Air Resources Board. 21 April 2005. <u>http://www.arb.ca.gov/desig/adm/adm.htm</u>.

jurisdiction of the RWQCB. A TMDL defines the specified maximum amount of a pollutant which can be discharged into the water-body from all combined sources. These water-body specific targets are considered necessary by the USEPA in order to attain water quality standards in an impaired watercourse.

Consistency: Development allowed under the proposed General Plan designation and the proposed project would decrease storm water runoff compared to existing conditions (refer to *Section 2.9 Hydrology and Water Quality*). Development on the site would conform to the requirements of the City of Sunnyvale regarding erosion and sedimentation control during construction, including preparation and conformance with a Storm Water Pollution Prevention Plan (SWPPP), which identifies specific measures for reducing construction and post-construction impacts. Any new development would also be subject to Best Management Practices (BMPs), which would likely improve the quality of storm water runoff (refer to *Section 2.9 Hydrology and Water Quality*). For these reasons, the project would be consistent with the Plan.

Santa Clara Valley Urban Runoff Pollution Prevention Program, National Pollution Discharge Elimination System, and Storm Water Management Ordinance

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), previously called the Santa Clara Valley Nonpoint Source Program, was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban storm water runoff. This program was also designed to fulfill the requirements of Section 304 (1) of the Federal Clean Water Act, which mandated that the USEPA develop National Pollution Discharge Elimination System (NPDES) Permit application requirements for various storm water discharges, including those from municipal storm drain systems and construction sites.

Additional water quality control measures were approved in October 2001, when the Regional Water Quality Control Board (RWQCB) adopted an amendment to the NPDES Permit Number CAS 029718, Provision C.3., for Santa Clara County. The amendment to Provision C.3 includes new storm water discharge requirements for new development and redevelopment within the boundaries of the 15 jurisdictions/co-permittees that constitute SCVURPPP, including the City of Sunnyvale that create, add, or replace one acre or more of impervious surface area.

Each co-permittee has developed an Urban Runoff Management Plan (URMP) to reduce, control, or otherwise address pollutant sources in discharges to the storm drain system. Departments within the City have adopted Best Management Practices (BMPs) and Standard Operating Procedures (SOPs) to reduce the presence of pollutants in stormwater discharges to the maximum extent practicable.

In response to the new permit requirements, the City of Sunnyvale adopted a Storm Water Management Ordinance in August 2003 (Municipal Code Chapter 12.60). This ordinance outlines the regulations and requirements required of all water entering the storm drain system on any developed or undeveloped land within the City, in compliance with the NPDES permit.

Consistency: Development on the site will be required to implement erosion control and storm water management practices during project construction, in accordance with the SCVURPPP and NPDES permit requirements. Potential impacts to the water quality of runoff could occur during construction. Runoff-borne pollution and associated impacts would increase both during and after construction of future development on the site. Section 2.9 Hydrology and Water Quality of this EIR identifies programmatic mitigation measures, including conformance with the SCVURPPP, NPDES permit, and the Storm Water Management Ordinance, which will serve to reduce water quality impacts from the development allowed by the proposed land use designation.

Santa Clara County Congestion Management Program

The Santa Clara County Valley Transportation Authority (VTA) oversees the *Santa Clara County Congestion Management Program* (CMP). The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gas tax revenues. The CMP legislation requires that each CMP contain five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis element; and 5) a capital improvement element. The Santa Clara County CMP includes the five mandated elements and three additional elements, including: a county-wide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element.

Consistency: The proposed project would allow for redevelopment of an existing infill site, located along and near major roadways and US 101, with new commercial and residential uses. The redevelopment of the site would not generate a substantial amount of additional traffic trips, as compared to existing conditions (refer to Section 2.3 *Transportation* of this EIR). For these reasons, the project would be consistent with the CMP.

1.6.2 Local Plans and Policies

City of Sunnyvale General Plan

The City's General Plan is a comprehensive, long-term plan that represents the City's official development policy. The General Plan is composed of many separate documents, or subelements, which cover different issues including transportation, community development, environmental management, and public safety. Each sub-element contains goals, policies, and action statements. Relevant General Plan goals are described below:

<u>Land Use Goal 2.1A</u> calls for the City to maintain a pattern of land use which provides for a variety and balance of land uses and which respects the capabilities and limitations of natural and man-made features.

Consistency: The site is located in an area which contains a mix of residential, commercial, and hotel uses. The project proposes to redevelop the existing hotel site with a new hotel and residential uses. These uses would be balanced on the site and would not be incompatible. The project, therefore, would be consistent with this goal.

Land Use Goal 2.1C states to allow growth and change in the community which can be served within the capacities of existing and planned facilities.

Consistency: The project proposes to develop a new hotel and residential development on the site. As discussed in *Section 2.11 Utilities and Service Systems*, there is sufficient utility capacity to serve the proposed project. For this reason, the project would be consistent with Land Use Goal 2.1C.

<u>Open Space Goal 2F</u> states that the City should encourage efforts by industrial and commercial enterprises in the City to preserve, develop, operate and maintain open space and recreational facilities that are available to people who live, work, or visit in Sunnyvale.

Consistency: The proposed project includes an approximately 1.63-acre landscaped common recreation area. The podium would include a pool, recreation area, and associated amenities for the residents of the proposed residential development. For this reason, the project is consistent with Open Space Goal 2F.

<u>Housing and Community Revitalization Goal 2.3A</u> states that the City should foster the expansion of the housing supply to provide greater opportunities for current and future residents, given environmental, social, fiscal, and land use constraints.

Consistency: The project specifically proposes development of up to 251 residential units on the site, which would increase the supply of housing in the City. For this reason, the proposed project would be consistent with the Housing and Community Revitalization Goal 2.3A.

<u>Housing and Community Revitalization Goal 2.3C</u> states that the City should promote and maintain a diversity in tenure, type, size, location, and cost-of-housing to permit a range of individual choice for all current residents and those expected to become City residents as a result of normal growth processes and employment opportunities.

Consistency: The project proposes development of a new hotel, with up to 263 rooms, and up to 251 residential units. The proposed residential development would provide a range of condominium units (one to three bedroom units, ranging in size from approximately 650 square feet to 1,400 square feet), which would contribute to the housing choices in Sunnyvale. For these reasons, the proposed project would be consistent with the Housing and Community Revitalization Goal 2.3C.

<u>Seismic Safety Goal 2.4A</u> states that the City should ensure that natural and human-caused hazards are recognized and considered in decisions affecting the community, and that land uses reflect acceptable levels of risk based on identified hazards and occupancy.

Consistency: As discussed in Section 2.8 Geology and Soils and Section 2.10 Hazards and Hazardous Materials, the proposed project would be built in conformance with the Uniform Building Code and would incorporate measures to minimize or avoid soil, seismicity, and hazardous materials impacts. For this reason, the proposed project would be consistent with the Seismic Safety Goal 2.4A.

<u>Community Design Goal 2.5C</u> states that the City should ensure that buildings and related site improvements for private development are well designed and compatible with surrounding properties and districts.

Consistency: The proposed hotel and residential development would be designed to be compatible with the adjacent hotel to the east and the residential development to the west of the site. The project will conform to the City of Sunnyvale's *City-Wide Design Guidelines*. For these reasons, the project would be consistent with Community Design Goal 2.5C.

<u>Solid Waste Goal 3.2B</u> states that the City should reduce solid waste disposal to 50 percent or less of the amount generated in 1990 in the most cost-effective manner.

Consistency: A City approved Waste Management Plan will be prepared for the proposed project, which will include recommendations for recycling demolition waste, reusing or recycling unused construction materials. The project shall implement the recommendations made in this report and the measures included in *Section 2.11 Utilities and Service Systems* and *Section 2.12 Energy* to reduce waste. For these reasons, the project would be consistent with Solid Waste Goal 3.2B.

<u>Sanitary Sewer System Goal 3.3A</u> states that the City should ensure that the quantity of wastes generated does not exceed the capabilities of the transportation and disposal facilities.

Consistency: As discussed in *Section 2.11 Utilities and Service Systems*, the project would not exceed the capacity of existing sewer lines or the wastewater treatment facility; therefore, the project would be consistent with the Sanitary Sewer System Goal 3.3A.

<u>Surface Runoff Goal 3.4C</u> states that the City should ensure that flood hazards are recognized.

Consistency: As discussed in Section 2.9 Hydrology and Water Quality, the project site is located in flood zone AO. Mitigation measures to avoid or reduce flooding impacts, which are proposed as part of the project, are also identified in this section. The project, therefore, is consistent with the Surface Runoff Goal 3.4C.

<u>Surface Runoff Goal 3.4D</u> states that the City should minimize the quantity of runoff and discharge of pollutants to the maximum extent practicable by integrating surface runoff controls into new development and redevelopment land use decisions.

Consistency: The proposed development would result in a net reduction in impervious surfaces on the site and, therefore, a reduction in runoff. The project will also be required to comply with the City's National Pollution Discharge Eliminations System permit and C.3 Provisions, and to incorporate best management practices to minimize the quantity and quality of runoff from the site (refer to *Section 2.9 Hydrology and Water Quality*). For these reasons, the project would be consistent with the Surface Runoff Goal 3.4D.

<u>Noise Goal 3.6A</u> states that the City should maintain or achieve a compatible noise environment for all land uses in the community.

Consistency: As discussed in *Section 2.4 Noise*, with implementation of the identified mitigation measures, the proposed project would not be subject to excessive noise levels and would meet the City's noise goals. The project, therefore, would be consistent with this goal.

<u>Noise Goal 3.6B</u> states that the City should preserve and enhance the quality of neighborhoods by maintaining or reducing the levels of noise generated by transportation facilities.

Consistency: The project would not generate a substantial amount of additional traffic and, therefore, would not significantly increase vehicle noise levels on nearby roadways. With the implementation of the noise measures identified in *Section 2.4 Noise*, the project would not be subject to noise levels above City noise standards. In addition, the positioning of the four proposed condominium buildings would reduce noise related to traffic on US 101 at the offices located to the south of the project site. For these reasons, the project would be consistent with Noise Goal 3.6B.

<u>Noise Goal 3.6C</u> states that the City should maintain or achieve acceptable limits for the levels of noise generated by land use operations and single events.

Consistency: As discussed in *Section 2.4 Noise*, the project would not result in significant long-term or single event increases in noise levels. The project, therefore, would be consistent with Noise Goal 3.6C.

<u>Air Quality Goal 3.7B</u> states that the City should reduce air pollution impacts from future development.

Consistency: Currently, the City of Sunnyvale has more jobs than housing. Many people working in Sunnyvale commute from neighboring cities and counties. By developing housing, the project would provide people who are employed in Sunnyvale the opportunity to live in the City, therefore, reducing overall vehicle miles traveled. This would have an incremental beneficial impact on air quality. The project also includes measures to reduce air quality impacts during construction (refer to *Section 2.5 Air Quality*). For these reasons, the project would be consistent with Air Quality Goal 3.7B.

<u>Air Quality Goal 3.7C</u> states that the City should make a contribution towards improving regional air quality.

Consistency: Currently, the City of Sunnyvale has more jobs than housing. The proposed project would allow for an increase in the residential holding capacity allowed under buildout of the General Plan and thus, would increase population. The proposed project would also intensify the use of the project site, therefore, generating more traffic trips to and from the project site. However, the development of residential uses in Sunnyvale would reduce commute travel time and distances. Since the in-commute of vehicles traveling to jobs in Sunnyvale from residences in distant locations contributes to the regional air quality problems, placing dwelling units in the City would be expected to result in incremental benefits to regional air quality. Although there is no assurance that the residents on this site would move here from more distant locations, providing the opportunity for them to do so is consistent with Air Quality Goal 3.7C.

<u>Efficient Transportation Policy C3.1</u> states that the City should achieve an operating level of service (LOS) of "D" or better on the City-wide roadways and intersections, as defined by the functional classification of the street system.

Consistency: As discussed in Section 2.3 Transportation, the project study intersection, Lawrence Expressway and Oakmead Parkway intersection would continue to operate at LOS D under project conditions. For this reason, the project would be consistent with Efficient Transportation Policy C3.1.

<u>Transportation Policy R1.4</u> states that the City should achieve an operating level LOS E or better for all regional roadways and intersections, as defined by the City functional classification of the street system.

Consistency: As discussed in *Section 2.3 Transportation*, the project study intersection, Lawrence Expressway and Oakmead Parkway intersection would continue to operate at LOS D under project conditions. For this reason, the project would be consistent with Transportation Policy R1.4.

Sustainable Development and Green Buildings

In February 2004, the City Council approved a policy to encourage sustainable development and provide an incentive for developing green buildings. The policy encourages public and private facilities to include green building design features into new construction, remodeling, and maintenance.

Consistency: The project will be required by the City to incorporate general design concepts for green buildings and proposed to include measures for increased energy efficiency, water conservation, use of renewable resources, and environmentally sensitive site design (refer to *Section 2.12 Energy*). For these reasons, the project would be consistent with the Sustainable Development and Green Building Policy.

2. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

In accordance with Section 15143 of the CEQA Guidelines, the discussion in this EIR is focused on the significant effects on the environment resulting from the proposed General Plan Amendment and specific development project.

The proposed Specific Plan would allow for more development than what is proposed by the specific development project: the Specific Plan allows for 10 more residential units and 10 more rooms in the hotel than the proposed specific development project. For this reason, the EIR analyzes the impacts of the proposed project based on the buildout of the proposed Specific Plan to be conservative. Impacts of the specific development project are addressed when they are not covered by the Specific Plan analysis.

2.1 LAND USE

2.1.1 Setting

Existing Land Use

The 8.83-acre project site is located at 1250 Lakeside Drive in Sunnyvale. The project site is located south of US Highway 101 (US 101) and east of Lawrence Expressway (refer to Figures 2 and 3). The site is comprised of two parcels (Assessor Parcel Numbers 216-43-035 and 216-43-036). The project site is currently occupied with an existing two-story hotel, landscaping, and surface parking lots. The hotel consists of five rectangular-shaped buildings, totaling 378 rooms. There is also a main lobby and office building for the hotel located on the southwest portion of the site. A pool area, leading to a man-made lake is located south of the main office building.

Surrounding Land Uses

Surrounding land uses include an extended stay hotel to the east of the project site, a manmade lake, office buildings, convenience retail, a brew pub, and restaurants to the south. Five-story apartments (Avalon) are located to the west, and US 101 and Lakeside Drive, a frontage road, are located to the north of the project site (refer to Figure 3). The Avalon residential area is part of the Lawrence 101 Specific Plan, which allows for up to 1,100 residential units and up to 30,000 square feet of commercial/retail uses within the area bounded by US 101 to the north, Lakeside Drive to the east, Oakmead Parkway to the south, and Lawrence Expressway to the west of the project site.

The Lakewood Village residential neighborhood is located on the north side of US 101, east of the Lawrence Expressway. Another residential neighborhood, the San Miguel area, is located south of US 101 and west of Lawrence Expressway.

2.1.2 Land Use Impacts

Thresholds of Significance

For the purposes of this project, a land use impact is considered significant if the project would:

- Substantially or adversely change the type or intensity of existing or planned land use in the area;
- Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height;
- Conflict with established residential, recreational, educational, religious, or scientific uses of an area;
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use;
- Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere; or
- Result in substantial shading of existing residences and/or a public park or open space area.

Land Use Conflicts

While this EIR evaluates both a policy level decision (revising the City's General Plan) and a specific development, the basic question of the suitability of the site for the proposed land use must be determined during the General Plan decision-making process.

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of *land use compatibility*. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and annoyances to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts *from the proposed project upon persons and the physical environment*, and potential impacts *from the project's surroundings upon the project itself*.

General Plan Amendment and Specific Development Project Impacts

The project proposes to amend the General Plan land use designation on the project site from *Industrial* to *Specific Plan*. The proposed Specific Plan would allow for the development of up to 251 residential units, a new hotel with up to 263 rooms, and up to 3,000 square feet of neighborhood commercial uses.

Impacts From the Proposed Project

An existing hotel currently occupies the project site. As described above, the site is surrounded by a mix of uses, including a hotel, residences, offices, and commercial uses. An extended stay hotel is adjacent to the east of the project site and residential development is located west of the project site.

The project proposes a General Plan amendment to change the land use designation on the site from *Industrial* to *Specific Plan* and a specific development project to allow for the redevelopment of the project site with a new hotel and residential development. The site is located within a developed, urban area. The project proposes land uses similar to the existing use on the site and to the adjacent residential and hotel uses; therefore, it is not anticipated that residential and hotel land uses on the site would be incompatible with the adjacent land uses.

Population and Housing Impacts

Currently, the City has more jobs than housing. The proposed project would allow for development of residential uses, helping meet the City's housing needs. Impacts associated with adding housing and increasing population include increased energy usage, traffic impacts, utility impacts, and availability of public services. These impacts are discussed in their relevant sections (*Sections 2.12 Energy, 2.3 Transportation, 2.11 Utilities and Service Systems, and 3. Availability of Public Services*).

Shade and Shadow Impacts

Under the current General Plan and zoning designation on the project site, the maximum allowed building height is 75 feet, plus an additional 25 feet for towers, spires, machinery penthouses not exceeding 25 percent of the roof area on which a penthouse is located, scenery lofts, cupolas, water tanks, telecommunications facilities, and similar architectural and utility structures including equipment screening (Municipal Code 19.32.030). The existing hotel on the site is 25 to 35 feet in height.

The project proposes a maximum building height limit of 80 feet, plus an additional 25 feet for towers, spires, machinery penthouses not exceeding 25 percent of the roof area on which a penthouse is located, scenery lofts, cupolas, water tanks, telecommunications facilities, and similar architectural and utility structures including equipment screening (Municipal Code 19.32.030). This would permit a building height increase of up to five feet above what is currently allowed and an increase of 45 feet above existing conditions. Buildings of up to 80 feet in height could create increased shadows or shading on adjacent or nearby structures and properties during certain hours of the day and certain months of the year. The primary areas of concern for shading are existing residential areas and public and private open spaces.

There is an existing residential area to the west of the project site and private open space (the man-made lake) to the south of the site. There are no existing public open space areas in the immediate site vicinity.

The shadow impacts on the existing Avalon residential area and private open space are discussed for three different times of the year: December 21, June 21, and March/September 21. Since the solar conditions on the latter two dates (the spring and fall equinoxes) are identical, they are considered together as an intermediate between the two extremes. Maximum shading occurs on December 21, the winter solstice, when the sun is at the lowest angle above the horizon. Since the vast majority of solar energy is received between 9:00 AM and 3:00 PM, this period of the day is evaluated in the following shadow analysis (refer to Appendix C of this EIR).

Shading Impacts on the Existing, Adjacent Residential Development

Shadow length and bearing calculations were performed for various locations on the site to determine whether the proposed building heights would cast substantial shadows on the adjacent residences. In the winter (around December 21), when shadows are longest, the proposed hotel building of up to 80 feet in height would result in shading of the eastern portion of the adjacent Avalon residential development during early morning hours. The shadows would shorten significantly and extend due north, covering primarily Lakeside Drive and a small portion of the US 101 alignment, by noon in the winter months. It should be noted that the easternmost Avalon buildings already cast shadows on all buildings to their northwest in the morning under existing conditions. The project, therefore, will only cast new shadows on the Avalon development in the afternoon hours in the winter. In the spring and fall (March/September 21), morning shadows from the proposed 80-foot tall hotel would barely extend onto the Avalon development. In the summer months (June 21), the morning shadows cast by the hotel building would not cross Lakeside Drive.

The City's Municipal Code specifies that no building permit shall be issued for any construction that would shade or create shadow on more than 10 percent of the rooftops of adjacent residential buildings during 9 AM to 3 PM (Municipal Code 19.56.020). As mentioned above, shadow lengths are the longest during the winter. As shown in Figure 4 in Appendix B, the project, at a height of 80 feet, would shade less than 10 percent of the adjacent Avalon development during the winter. As mentioned previously, the shadow cast by the proposed project would shade the east facade of the easternmost building of the Avalon development and not the rooftop. Therefore, the proposed project would not limit the solar access of the Avalon development as defined by Sunnyvale Municipal Code 19.56.020.

The proposed hotel and residential buildings would **not** cast shadows extending to the single-family neighborhood on the north side of US 101.

Shading Impacts on Private Open Space

Shadows generally move from west to north to east and do not extend south of a structure. The proposed buildings, therefore, would not cast shadows upon the man-made lake and private open space located south of the site.

Shading Impacts on the Project Itself

The proposed hotel and residential buildings would also shade the proposed landscaped recreation podium. Year-round, the proposed residential buildings oriented around the landscaped podium would shade portions of podium area throughout the day. Typically, the threshold for significance for shading impacts focuses on impact to existing areas and not to a project shading itself. For this reason, partial shading of the proposed landscape podium is not considered a significant impact.

<u>IMPACT LU-1</u>: The proposed uses on the site would be compatible with the surrounding land uses in the project area and would not result in significant shading impacts on the existing residential use near the site. The project, therefore, would not result in significant land use impacts to surrounding land uses. (Less Than Significant Impact)

Impacts to the Proposed Project

The project would allow for the development of residential land uses fronting a major highway, which may expose future residences to excess noise, light, dust and litter, and air pollution. These potential impacts on future residents, and the mitigation measures for them, are discussed in *Sections 2.4 Noise, 2.2 Visual and Aesthetics, and 2.5 Air Quality* of this EIR.

<u>IMPACT LU-2</u>: Development of the proposed project may expose future residents to excess noise, light, dust, and air pollution from the adjacent US 101 corridor. These impacts are addressed in their respective section of this EIR.

Program-level and Project-Specific Mitigation and Avoidance Measures

Mitigation and avoidance measures identified in this and subsequent sections of this EIR include both program-level measures and project-specific measures. This is necessary because the project evaluated in this EIR includes amendments to the City's adopted General Plan (i.e., program-level analysis) and a specific Planned Development Rezoning (project-level analysis).

Once approved, a General Plan amendment and Specific Plan, particularly a change in the land use designation on a piece of property, will continue to be in effect, independent of any associated PD Zoning and whether or not a particular property owner chooses to implement it at any particular point in time. The General Plan is a long range planning document; its policies identify the standards and goals that are to guide individual near term development, but its implementation is the responsibility of the City as a whole, not individual property owners. An amendment to the General Plan cannot be conditioned, even for environmental mitigation. Implementation of the General Plan, however, can be assumed in the context of all of its policies and programs and in the context of other ordinances, laws, and adopted policies.

Each *Mitigation and Avoidance* subsection of this EIR identifies the specific policies and goals in the General Plan that establish the standards for particular categories of mitigation, or which address the types of measures that would be assumed to avoid impacts. In some cases, the subsections will also include adopted policies, existing ordinances or laws, or other

programmatic mitigation measures that are in place and which can reasonably be assumed to be the source of future mitigation or avoidance measures. Should the currently proposed PD zoning not be implemented, other future development proposed under the *Specific Plan* designation would be evaluated for conformance with these General Plan goals and policies, as well as other adopted policies, ordinances and laws, and may or may not result in impacts similar to those from the proposed PD zoning.

The City does not adopt reporting programs for individual General Plan amendments, but reports on the status of its General Plan in conformance with state law [CEQA Guidelines §15097(b)].

After identification of General Plan policies and other Program-level Measures, the *Mitigation and Avoidance* subsections in this EIR will discuss specific project-level mitigation and avoidance measures that are included in the project as it is proposed or that the City of Sunnyvale has determined could reasonably be expected to reduce adverse impacts.

2.1.3 General Plan Policies and Actions

The policies and actions of the City of Sunnyvale General Plan have been adopted for the purpose of avoiding or mitigating potential environmental effects resulting from planned development within the City. Conformance with the following General Plan policies and actions will reduce or avoid land use impacts:

Transportation Action Statement R1.3.2 promotes shorter commute trips and ease congestion by advocating that all communities provide housing and employment opportunities.

Transportation Policy R1.7 states that the City should contribute to efforts to minimize region-wide average trip length, and single-occupant vehicle trips.

Strong Economy Policy C4.1.3 promotes commercial uses that respond to the current and future retail service needs of the community.

Land Use Policy 2.1A.2 provides for a full range of residential densities which will offer opportunities for a mix of dwelling and tenure type.

The Neighborhoods Policy N1.2 requires new development to be compatible with the neighborhood, adjacent land uses, and the transportation system.

The Neighborhoods Action Statement N1.2.1 states that the City should integrate new development and redevelopment into existing neighborhoods.

The Neighborhoods Action Statement N1.2.2 states that the City should utilize adopted City design guidelines to achieve compatible architecture and scale for renovation and new development in Sunnyvale's neighborhoods.

The Neighborhoods Action Statement N1.2.3 states that the City should develop specific area plans to guide change in neighborhoods that need special attention.

Community Design Action Statement 2.5C.5f states that the City should encourage new construction to be designed so that it minimizes the impact on the privacy of adjoining residential properties.

2.1.4 Conclusion

The proposed project, in conformance with the above General Plan polices and mitigation measures identified in *Sections 2.4 Noise, 2.2 Visual and Aesthetics, and 2.5 Air Quality*, would not result in significant land use impacts. (Less Than Significant Impact with Mitigation)

2.2 VISUAL AND AESTHETICS

2.2.1 Setting

Visual Character of the Project Site and Surrounding Area

The 8.83-acre project site is located within a developed urban area of Sunnyvale and is developed with an existing hotel, landscaping, and surface parking lots. The existing hotel consists of five buildings, several of which are sited parallel to each other and total approximately 233,188 square feet (refer to Figure 3 and Photos 1-5). The buildings are two to three stories tall (approximately 25-35 feet), and the main lobby and office building is approximately 30 feet tall. A pool and recreation area is located south of the main building. A man-made lake is located just off-site, along the length of the site's southern boundary (refer to Photo 3). Mature trees and landscaping are present along the frontage of the site and around the buildings. Trees are also planted within the parking lot areas. Other than the mature trees along the site frontage, the project site does not contain significant visual or aesthetic resources, and the site itself is not part of a scenic view corridor.

The project site fronts Lakeside Drive, which is a two-lane, undivided frontage road, and US 101. In the vicinity of the site, US 101 is an eight-lane divided freeway. There is a hotel to the east of the site, a man-made lake and offices to the south of the site, and a residential development to the west of the site. The adjacent Avalon residential development located west of the project site is approximately 68 feet tall, and the adjacent extended-stay hotel east of the project site is approximately 35 feet tall. The restaurant and commercial offices to the south of the site, across the man-made lake, are approximately 22 feet and 30 feet tall, respectively.⁵

Views of the Project Site from Surrounding Area

The site and the surrounding area are generally flat and, as a result, the site is only visible from the immediate area. Views of the site are mostly available from Lakeside Drive, US 101, and the surrounding land uses. In general, views of the site from Lakeside Drive and Oakmead Parkway are screened by large trees located along the street frontage. Views of the site from land uses to the north of US 101 are blocked by existing sound walls along US 101. A sound wall is located on the north side of US 101 in front of the residential and commercial land uses directly north of the project site and along the south side of US 101 in front of the Avalon development. Photos 6, 8, 10, and 12 show existing views of the project site from several vantage points in the immediate area.

⁵ Lynch, Steve. "Re: Lakeside." E-mail to David J. Powers and Associates, Inc. from City of Sunnyvale. 8 June 2005.

Link to Photos 1 and 2

Link to Photos 3 and 4

Link to Photos 5

Allowable Development Under Existing General Plan and Zoning Designations

While the CEQA Guidelines (Section 15125) require a comparison of the proposed project with the existing physical environmental conditions as they exist at the time the Notice of Preparation is published, it should also be noted that, under the current General Plan and zoning designations applicable to the site, the site could be developed with a building or buildings totaling up to 153,854 square feet, with a maximum allowed building height of 75 feet (eight stories). This amount of development would be required to be set back at least 25 feet from the Lakeside Drive property line.

Redevelopment of the site under the existing designation would likely be with a commercial (retail) or industrial use. If commercial, the square footage would typically be configured into one large retail building (one or two stories maximum), with the remainder of the site as landscaping and parking. If industrial, there would likely be multiple buildings (at one or two stories in height), with the remainder of the site as landscaping and parking. Although the maximum square footage could be stacked vertically, this is not a likely scenario given the cost of construction for a retail or commercial building and the cost of land in Sunnyvale.

2.2.2 Visual and Aesthetics Impacts

Thresholds of Significance

For the purpose of this project, a visual and aesthetics impact is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

General Plan Amendment and Specific Development Project Impacts

The assessment of a project's visual impact is dependent upon an evaluation of the size, character and design of the proposed development, and the degree to which the project is visually compatible with the surrounding community. The primary criteria that are considered in this assessment include: 1) the spatial relationship of the proposed structures within the site and to neighboring land uses; 2) the mass, scale, and height of the proposed structures and their visibility from the surrounding area; 3) the degree to which the project would contrast with the surrounding development in design and materials; 4) whether the project would damage scenic resources or have a substantial effect on a scenic vista; and 5) whether the project is likely to result in visual impacts including glare, night-time lighting requirements, or provide elevated views to nearby residences.

Change in Visual Character

As described above in the *Setting* section, the project site is located within a developed urban area of Sunnyvale and contains an existing hotel. The proposed Specific Plan project would allow the replacement of the existing hotel buildings on the site, which are up to 35 feet tall, and the redevelopment of the project site with a new hotel and residential buildings that could be up to 80 feet tall. The residential development would consist of four buildings that would be oriented around a landscape podium (refer to Figure 4). Parking for the proposed residential development would be provided underneath the landscaped podium, at grade, by a two-tiered parking structure, approximately 20 feet tall, along the Lakeside Drive frontage, near US 101, and by surface parking lots (refer to Figure 9). Parking for the new hotel would be provided by another two-tiered parking structure, approximately 20 feet tall, along the method by another two-tiered parking structure, approximately 20 feet tall, along the provided by another two-tiered parking structure, approximately 20 feet tall, along the provided by another two-tiered parking structure, approximately 20 feet tall, along the provided by another two-tiered parking structure, approximately 20 feet tall, along the provided by another two-tiered parking structure, approximately 20 feet tall, along the provided by another two-tiered parking structure, approximately 20 feet tall, along the western boundary of the site (refer to Figure 9). The proposed project includes the preservation of all significant sized trees located along the site frontage.

Visual Simulations

In order to evaluate the impacts of the project on the present skyline profile and existing view corridors, photographic simulations of the project were prepared that illustrate the proposed building massing and scale in its surroundings. Four vantage points were selected for the photographic simulations to illustrate views of the project:

- 1. Photo taken from the Lawrence Expressway overcrossing, looking southeast (Photo 7)
- 2. Photo taken across US 101, looking southwest (Photo 9)
- 3. Photo taken from the second floor balcony of the multi-family apartment complex, north of the site, across US 101 (Photo 11)
- 4. Photo taken from the Lakeside Drive and Oakmead Parkway intersection, looking north (Photo 13)

Photos 6-12 show each of the four views described above under existing conditions and photographic simulations of how each view would appear with development of the proposed project.

Comparison of Existing and Proposed Development

The project would be different in mass, height, and appearance than the existing development; the proposed project could be more than twice the height of the existing hotel and adjacent (Extended Stay) hotel to the east of the project site. As shown in Photos 7 and 11, the proposed project buildings would be taller and more visible than the existing hotel buildings on the site. The change in visual character of the project site would be most noticeable from the immediate adjacent land uses and roadways.

However, although the proposed residential and hotel buildings would be the tallest structures in the immediate area, the site is within a developed urban area, which is adjacent to US 101, and the project would be similar in stature to the existing residential apartments west of the project site. In addition, the project has been designed to conform to the City's Design Guidelines. Since the project includes the preservation of the significant sized trees along the site frontage, views of the project site from the immediate area and surrounding roadways are generally obstructed by these trees (refer to Photos 9 and 13). Views of the

Link to Photos 6 and 7

Link to Photos 8 and 9

Link to Photos 10 and 11

Link to Photos 12 and 13

project site from the residential uses to the north of US 101 would be partially blocked by the existing 10-12 foot sound wall on the north side of US 101 and the existing trees along the project frontage (refer to Photo 11). For these reasons, the project would not result in a significant change in the visual character of the site.

<u>IMPACT VIS-1:</u> The proposed hotel and residential development could be up to 80 feet tall, which would change the visual and aesthetic character of the site. However, the site is within a developed urban area of Sunnyvale, adjacent to US 101, and the proposed development would be similar in scale to the existing apartments to the west. In addition, the project proposes the preservation of the mature trees along the site frontage, which screen views into the site. For these reasons, the project would not result in a significant change in the visual character of the site. (Less Than Significant Impact)

Impacts to Visual Resources and Scenic View Corridors

As described in the *Setting* section above, due to the flat nature of the area and the presence of mature trees along the site frontages, views of the site are limited to the immediate surrounding land uses and roadways. Other than the mature trees along the site frontage, the project site does not contain significant visual or aesthetic resources, and the site itself is not part of a scenic view corridor. The development of the proposed project on the site, therefore, would not significantly impact visual resources or scenic view corridors.

IMPACT VIS-2: The project would not impact significant visual resources or scenic view corridors. (Less Than Significant Impact)

Light and Glare Impacts

The existing hotel currently has outdoor security lighting around the buildings and throughout the surface parking lots. The proposed project would have outdoor security lighting on the site, along walkways, throughout the parking areas, and entrance areas. Low-pressure sodium lighting would be used. This outside lighting would incrementally increase the level of illumination in the area. Because the proposed project would be taller than the buildings adjacent to the project site, the City would require that the outside lighting on the site would be directed in a way not to cause significant glare or light spillover onto adjacent properties. The addition of the project lighting, therefore, would not result in significant light and glare impacts.

The proposed project would not be constructed with highly reflective materials. The buildings would not be sited in a parallel alignment, and the surfaces of the buildings would be articulated, not flat, in order to minimize glare from the structures (refer to Appendix B). Adjacent uses to the proposed project are set back from the project site by Lakeside Drive, surface parking lots, and the man-made lake, and would not be impacted by reflective materials or lighting on the project site.

The proposed residential units could be subject to illumination from street lighting along Lakeside Drive and US 101. Given that outside lighting would be included as part of the proposed development, however, illumination from the existing roadways is not anticipated to significantly impact future residents at the site.

IMPACT VIS-3: The proposed buildings and outdoor lighting for the proposed project would be designed, located, and directed in a manner to avoid light and glare impacts to surrounding uses. (Less Than Significant Impact)

2.2.3 General Plan Policies and Actions

Community Design Policy 2.5A.2 states that the City should ensure that new development is compatible with the character of special districts and residential neighborhoods.

Community Design Action Statement 2.5A.2c states that the City should encourage infill development or redevelopment which is compatible with the use, density, setbacks, height and, where possible, the predominant building style and size of the surrounding district or neighborhood.

Community Design Action Statement 2.5B.1e states that the City should consider uniform and cohesive landscape themes for districts, major thoroughfares, City boundaries and neighborhoods.

Community Design Action Statement 2.5B.1h states that the City should provide attractive canopy trees in residential districts.

Community Design Policy 2.5C.2 states that the City should ensure the design is compatible with the natural and surrounding built environment.

Community Design Action Statement 2.5C.2d states that the City should require that on-site lighting be energy efficient, unobtrusive and located to minimize off-site glare while providing adequate night time safety.

Community Design Action Statement 2.5C.2i states that the City should require landscaped buffers on commercial or residential properties which provide adequate protection for adjoining residential properties.

Community Design Action Statement 2.5C.2j states that the City should consider prohibiting wing walls or other blank, high walls on buildings in order to create attractive transition zones between buildings.

2.2.4 Mitigation and Avoidance Measures

The project proposes the following measures:

<u>MITIGATION MEASURE VIS-1</u>: The project would conform to City-wide Design Guidelines and policies to further reduce visual impacts. The Design Guidelines and policies include, but are not limited to, the following:

• *Site Design Guideline* states that new development should adhere to the character of the existing neighborhood and be integrated into the surrounding development. New development shall not dominate or interfere with the established character of its neighborhood. Site design of projects shall be cohesive both functionally and visually.

- *Setting Policy A1* states that new projects should be compatible with their surrounding development in intensity, setbacks, building forms, material, color, and landscaping.
- *Setting Policy A3* states that there should be a transition between projects with different uses and intensities to provide a cohesive visual and functional shift. Create transition by using appropriate setbacks, gradual building height, bulk, and landscaping.
- *Setting Policy A6* states to preserve natural site features such as mature trees, creeks, views, etc. and incorporate into the site design of the new project.
- *Building Design Guideline* states that building should enhance the neighborhood and be harmonious in character, style, scale, color, and materials with existing buildings in the neighborhood.
- *Site Organization Policy B1* states to locate site components such as structures, parking, driveways, walkways, landscaping and open spaces to maximize visual appeal and functional efficiency.
- *Scale and Character Policy B2* states that adjacent buildings should be compatible in height and scale.
- *Parking Structures Policy B2* states to incorporate both horizontal and vertical articulations in visible facades of parking structures to reduce bulk and mass problem.
- *Parking Structures Policy B4* states to utilize the street level of parking structures for retail uses, or screen by dense landscaping and berming for visual relief.
- *Landscaping Guideline* states that landscaping shall be used to enhance sites and buildings, control climate and noise, create transition between adjacent uses, unify various site components, and define and separate functions and activities.

2.2.5 <u>Conclusion</u>

The project would change the visual and aesthetic character of the site. The site is, however, within a developed urban area of Sunnyvale, adjacent to US 101, and the proposed development would be similar in scale to the existing apartments to the west. In addition, the project proposes the preservation of the mature trees along the site frontage, which screen views into the site. For these reasons, the project would not result in a significant change in the visual character of the site. Conformance with the above General Plan policies and actions, as well as the City's Design Guidelines, will further reduce visual and aesthetic impacts. (Less Than Significant Impact)

The project would not impact significant visual resources or scenic view corridors. (Less Than Significant Impact)

As discussed above, the project would not result in significant light or glare impacts. (Less Than Significant Impact)

2.3 TRANSPORTATION

The following discussion is based on a traffic analysis completed by *Hexagon Transportation Consultants, Inc.* in March 2005. The purpose of this study was to evaluate the impacts of the proposed project on the transportation system. A complete copy of this report is included as Appendix D of this EIR.

2.3.1 Setting

Existing Transportation Network

A description of the existing transportation system facilities, including the roadway network, transit service, bicycle and pedestrian facilities, is provided below (refer to Figure 10).

Regional Access

<u>US Highway 101</u> (US 101) is generally a north/south freeway that, in the Bay Area, extends from north of San Francisco to south of San José. In the project vicinity, US 101 is oriented in a northwest/southeast direction and has eight lanes [six mixed-flow lanes, and two High Occupancy Vehicle (HOV) lanes]. US 101 provides access to the project site via an interchange at Lawrence Expressway.

<u>Lawrence Expressway</u> is a north/south roadway providing regional access from State Route 237 (SR 237) in the north to Saratoga Avenue in the south. It serves a variety of commercial, industrial, and residential uses. At its terminus to the south, Lawrence Expressway becomes Quito Road. At its terminus to the north, Lawrence Expressway becomes Caribbean Drive. Near the project site, Lawrence Expressway has six mixed flow lanes and two HOV lanes.

<u>Lakeside Drive</u> is a two-lane collector street with a two-way center left-turn lane. It provides direct access to the project site. Lakeside Drive begins at Arques Avenue in the west and ends at Scott Boulevard in the east. Lakeside Drive intersects with Oakmead Parkway south of the project site.

Pedestrian, Bicycle Facilities, and Transit Services

Pedestrian facilities in the project area primarily consist of sidewalks and crosswalks along the streets in the surrounding residential neighborhood and in nearby commercial areas. Sidewalks and crosswalks are found along virtually all nearby roadways, however, sidewalks are only available on the south side of Lakeside Drive.

The nearest bicycle lanes in the vicinity of the project site are found on Lakeside Drive and Oakmead Parkway. Bicycles are also permitted to use Lawrence Expressway (refer to Figure 10).

Existing transit services on the surrounding roadway network is provided by the Santa Clara Valley Transportation Authority (VTA). Bus route 55 provides the nearest transit service. It provides service along Lawrence Expressway and East Duane Avenue with 20-minute headways during commute hours.

Link to Figure 10 Existing Transportation Network

Existing Intersection Operations

Traffic operations at the study intersection were evaluated using TRAFFIX software to determine the Level of Service (LOS) for the AM and PM peak hours. TRAFFIX evaluates signalized intersection operation on the basis of average stopped delay for all vehicles at the intersection. The analysis uses procedures from the 1985 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX is also the Congestion Management Program (CMP) designated intersection LOS software analysis program. LOS is a qualitative description of operating conditions ranging from LOS A, free-flow conditions with little or no delay, to LOS F, jammed conditions with excessive delays. Acceptable LOS for CMP facilities is LOS E and for non-CMP facilities, it is LOS D.

The traffic analysis was based on peak-hour LOS for one signalized intersection: Lawrence Expressway and Oakmead Parkway. The Lawrence Expressway and Oakmead Parkway intersection is not considered a regional Congestion Management Program (CMP) intersection, however, Lawrence Expressway is considered a CMP facility. Based on the analysis, the intersection of Lawrence Expressway and Oakmead Parkway operates at LOS D during both the AM and PM peak hours.

Background Conditions

The following discussion describes background conditions in the project area. Background conditions are defined as conditions just prior to completion of the proposed project. Traffic volumes for background conditions include volumes from existing traffic counts plus traffic generated by other approved, but not yet constructed or occupied, developments.

There are no planned improvements to the study intersection. The background roadway network, therefore, is assumed to be the same as the existing roadway network.

The results of the level of service calculations show that the Lawrence Expressway and Oakmead Parkway intersection would continue to operate at LOS D under background conditions during the AM and PM peak hours.

2.3.2 <u>Transportation Impacts</u>

Thresholds of Significance

For the purposes of this project, a transportation impact is considered significant if the project would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or the City of Sunnyvale for designated roads or highway;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks;

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., from equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

General Plan Amendment and Specific Development Project Impacts

Project Trip Generation

The magnitude of traffic added to the roadway system by the project was estimated by multiplying the applicable trip generation rates by the size of the proposed development. The trip generation rates used for the proposed project are based on those published in the Institute of Transportation Engineers (ITE) manual, *Trip Generation*, Seventh Edition. Based on these rates, the proposed project would generate 289 trips during the AM peak hour and 326 trips during the PM peak hour. Trip credits were applied to account for: 1) the existing, 378-unit hotel located on the site, and 2) the internalization of project trips between the auxiliary retail, hotel, and residential uses. After subtracting these credits, the proposed project would generate 35 net new AM peak hour trips and 56 net new PM peak hour trips. The project would result in 25 fewer inbound and 60 additional outbound trips during the PM peak hour (refer to Table 2).

Project Trip Assignment

The trip distribution pattern for the proposed project was estimated based on existing travel patterns in the area, the locations of complementary land uses, and previous traffic studies. The project trip distribution and assignment for the net project trips are shown graphically on Figure 11.

Project Traffic Impacts

Project conditions are defined as background traffic volumes plus the addition of project traffic. The levels of service for project conditions are summarized in Table 2 below:

Table 2										
Intersection Levels of Service Summary										
		Existing		Background		Project				
Intersection	Peak Hour	Ave. Delay	LOS	Ave. Delay	LOS	Ave. Delay	LOS	Incr. In Critical Delay	Incr. In Critical V/C	
Lawrence Expwy	AM	37.7	D	37.7	D	38.0	D	0.0	0.0	
& Oakmead Pkwy	PM	43.3	D	43.3	D	43.6	D	0.0	0.0	

Link to Figure 11 Project Trip Distribution and Net Project Trip Assignment

During the AM and PM peak hours, the intersection of Lawrence Expressway and Oakmead Parkway would continue to operate at LOS D under project conditions. According to the City of Sunnyvale, the acceptable level of service at Lawrence Expressway/Oakmead Parkway intersection is LOS E, because Lawrence Expressway is a CMP-facility. The LOS standard on non-CMP facilities in Sunnyvale is LOS D. The study intersection, therefore, would continue to operate at an acceptable LOS during the AM and PM peak hours under project conditions.

<u>IMPACT TRANS-1</u>: The proposed project would result in 35 net new AM peak hour trips and 56 net new PM peak hour trips. The Lawrence Expressway and Oakmead Parkway intersection LOS would continue to operate at LOS D under project conditions. For this reason, the proposed project would not result in a significant traffic impact. (Less Than Significant Impact)

Parking

The project would be required to provide parking in accordance with the City's parking standards (Municipal Code Section 19.46.050). Parking for the project would be provided by a two-tiered parking structure, at grade underneath the landscape podium, and surface parking lots. The project would provide adequate parking, in accordance with the City's standards. The project, therefore, would not result in significant parking overflow or safety impacts.

<u>IMPACT TRANS-2</u>: The proposed project would provide adequate parking. (Less Than Significant Impact)

2.3.3 General Plan Policies and Actions

Transportation Policy R1.4 states that the City should achieve an operating level of service (LOS) E or better for all regional roadways and intersections, as defined by the City functional classification of the street system.

Efficient Transportation Policy C3.1 states that the City should achieve an operating level of service (LOS) of D or better on the City-wide roadways and intersections, as defined by the functional classification of the street system.

2.3.4 Mitigation and Avoidance Measures

The project proposes the following measures:

<u>MITIGATION MEASURE TRANS-1</u>: Implementation of the following Transportation Demand Management measures would reduce the number of daily vehicular trips to and from the site, which would further reduce transportation impacts:

• Bicycle Use: Secure storage areas should be well designed and located to make them safe and easy to use for residents. Hotel guest should be given easy access to bicycles for recreational use, through either an on-site rental or as a free amenity. Bicycles should also be available for short-term use by residents of the proposed project, either by adding to the rental market or through homeowner fee subsidies to make bicycle availability part of the amenity package for the proposed development.

- Car Rentals: Care rentals should be made easily available to hotel guests, and by extension to nearby residents, as part of the hotel management.
- Shuttle Vans: Scheduled shuttle van service should be provided to a number of regional destinations in addition to the airport. Service to Caltrain stations or other points that support commuters should be part of the amenity package for the proposed project.
- Carpools and Cost-Share Vehicles: Carpooling should be organized and encouraged through the homeowner association for on-site residents. In addition, programs should be explored that could make some number of commonly owned vehicles available on-site for residents to use on a short term basis.

2.3.5 Conclusion

As discussed above, the project would not result in significant transportation impacts. Conformance with the above General Plan policies and implementation of the above avoidance measures would further reduce transportation impacts. (Less Than Significant Impact)

2.4 NOISE

The following discussion is based on a noise analysis completed by *Charles M. Salter Associates* in March 2005. The complete noise analysis is included as Appendix E of this EIR.

2.4.1 <u>Setting</u>

Background Information

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a "decibel" scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the "A-weighted" decibel or dBA. Further, sound is averaged over time and penalties are added to the average for noise that is generated during times that may be more disturbing to sensitive uses such as early morning, or late evening.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods, such as L_{eq} , L_{dn} , or CNEL.⁶ Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a jet is taking off or when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on US 101 or in the middle of the night). For this report, the L_{dn} will be used as it is consistent with the guidelines for the City of Sunnyvale and the State of California.

Applicable Noise Standards and Policies

State Authority

The State of California published guidelines for noise compatible land use planning. Generally, exterior noise exposures fall into three categories: normally acceptable, conditionally acceptable, and unacceptable. The noise guidelines are expressed in terms of the L_{dn} . For residential, hotel, and motel land uses, normally acceptable noise levels are up to 60 dBA, conditionally acceptable noise level range between 60 dBA to 75 dBA, and unacceptable noise levels are 75 dBA and above. The City has not adopted the state guidelines but does consider them in land use planning.

 $^{{}^{6}}$ L_{eq} stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. L_{dn} stands for Day-Night Level and is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. CNEL stands for Community Noise Equivalent Level; it is similar to the L_{dn} except that there is an additional five dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. As a general rule of thumb where traffic noise predominates, the CNEL and L_{dn} are typically within two dBA of the peak-hour L_{eq}.

Noise Insulation Requirements (Title 24)

The California Code of Regulations (CCR) protects interiors of new multi-family dwellings from excessive noise. These requirements apply to hotels, motels, townhouses, condominiums, apartments, group care homes, and all other dwellings except single-family detached homes. The law requires that: 1) interior noise levels cannot exceed an L_{dn} of 45 dBA with doors and windows closed; and 2) a residential site with an outdoor L_{dn} above 60 dBA needs a detailed noise study which shows how the dwelling units will meet an interior L_{dn} of 45 dBA.

Existing Noise Conditions

The primary source of noise at the project site is vehicular traffic on US 101, located immediately north of the site. Long-term and short-term noise measurements were taken at various locations on the site (refer to Figure 12). Noise levels at the site range from 66 dB up to 76 dB L_{dn} , which exceed the normally acceptable range for residential uses. Table 3 summarizes the existing noise levels at the project site. The nearest sensitive noise receivers include the adjacent office buildings to the south of the project site and the adjacent residential development to the west of the site.

The project site is not located within an airport land use plan or in the vicinity of a private airstrip. The project site is not located within the noise impact zone for the Moffett Federal Airfield, as defined by 65 CNEL dBA noise contour. The site is, however, located under a flight path commonly used by aircrafts for training purposes.

Table 3Noise Measurements					
Measurement Location	Existing L _{dn}				
24-Hour Continuous Measurements					
1	76 dB				
2	66 dB				
15-Minute Spot Measurements					
3	75 dB				
4	67 dB				
5	68 dB				

Link to Figure 12 Noise Measurement Locations

2.4.2 Noise Impacts

Thresholds of Significance

For the purposes of this project, a noise impact is considered significant if the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

CEQA does not define what noise level increase would be considered substantial. The City of Sunnyvale defines a significant noise impact from new development on existing land uses if: 1) the existing noise level on the site is normally acceptable and the proposed project would increase the existing, normally acceptable noise level by more than five dBA, but the noise level is still normally acceptable, 2) the existing noise level on the site is normally acceptable, and the proposed project would increase the noise level by more than three dBA, and the noise level now exceeds the normally acceptable levels, or 3) the existing noise level on the site exceeds normally acceptable levels, and the proposed project increases the noise level by more than three dBA (see Table 4).

Table 4 Significant Noise Impacts from New Development on Existing Land Uses					
Existing L _{dn}	Significant Noise Impact (Increase in L _{dn} from New Development)				
Normally Acceptable	More than five dBA, but noise level still in the normally acceptable category				
Normally Acceptable	More than three dBA and the noise level now exceeds the normally acceptable category				
Exceeds Normally Acceptable	More than three dBA				

General Plan Amendment and Specific Development Project Impacts

Noise Impacts from the Project

Project Generated Traffic Impacts

As mentioned previously, the primary noise source in the project area is traffic on US 101. For traffic noise to increase noticeably (minimum of three dB increase), existing traffic volumes must double. The proposed project would generate approximately 510 net additional daily traffic trips (refer to Appendix D).⁷ Project generated traffic noise would not be noticeable over the existing traffic generated noise from US 101 and other nearby roadways. For this reason, the project-generated traffic would not result in significant noise impacts.

<u>IMPACT NOISE-1</u>: While the project would incrementally increase traffic volumes on the overall roadway network and in the site vicinity, project generated traffic would not be noticeable over existing traffic noise from US 101. (Less Than Significant Impact)

Mechanical Equipment

The proposed hotel and residential buildings would include mechanical equipment such as heating, ventilation, and air conditioning, cooling towers, and pool equipment. This additional mechanical equipment could increase noise levels at adjacent properties.

<u>IMPACT NOISE-2</u>: Use of additional mechanical equipment may increase noise levels above normally acceptable levels, as defined by the City of Sunnyvale (refer to Table 4) and above Municipal Code standards (Municipal Code Section 19.42.030). (Significant Impact)

Short-Term Construction Related Noise Impacts

Construction of the project would result in elevated short-term construction related noise at the existing adjacent land uses. The four main phases of construction are: 1) grading, excavation and below grade work, 2) structural steel, concrete, and exterior finishes, 3) interior framing, and 4) interior finishes. The noisiest of these phases is grading and below grade work, when heavy machinery would be in use and when pile driving (if necessary) would occur. Typical noise levels from these activities range from 80 to 105 dBA at a distance of 50 feet.

If pile driving is necessary, pile driving noise levels would vary with the distance between the pile driving and sensitive receptors, and would depend on the soils on-site. Conventional diesel-powered pile drivers, without noise mitigation, generate maximum instantaneous noise

⁷ The net daily traffic trips to the project site was calculated based on *ITE Trip Generation* rates of 5.86 trips per dwelling unit, 8.92 per hotel room, and 42.94 per thousand square feet of commercial, and an internal deduction of 50% applied to the commercial use only.

Net Trip Generation = [(251 proposed du x 5.86 trips/du) + (263 proposed hotel rooms x 8.92 trips/room) + (3 proposed ksf x 42.94 trips/ksf)] - (378 existing rooms x 8.92 trips/room) - [50% trip reduction for proposed commercial x (3 ksf x 42.94 trips/ksf)] = approximately 510 net daily trips.

levels of 105 dBA at a distance of 50 feet from the driver.⁸ This noise level is achieved every time the hammer strikes a pile. The noise decreases at a rate of approximately six (6) dBA per every doubling of distance. The noise levels at the adjacent sensitive receptors, therefore, would vary and would be dependent on the distance from the driver.

Due to the proximity of sensitive receptors, including the residences to the west of the site and offices to the south of the site (both approximately 50 feet from the site), construction work would result in a significant temporary noise impact.

<u>IMPACT NOISE-3</u>: The proposed project would result in short-term increase in noise levels in the project area, especially during grading, below grade work, and pile driving. (Significant Impact)

Noise Impacts to the Project

Based on vehicle counts from Caltrans, the traffic volume has not increased on US 101 at Lawrence Expressway over the last ten years, and has decreased in some years. Caltrans reports an increase of 2.1 percent on highways statewide on highways statewide from 2003 to 2004. If the traffic volume on US 101 were to increase at this pace, a cumulative increase of approximately 23 percent over 10 years, the noise levels at the site due to traffic on US 101 would increase by less than one dB. For the purposes of this analysis, a one dB increase is assumed. The noise levels at the project site would range from an L_{dn} of 60 dBA up to 77 dBA. Figure 13 shows the predicted noise levels at various locations on the site.

Acceptable outdoor noise levels for residential and hotel land uses is 60 dBA or less and the acceptable indoor noise level is 45 dBA or less. Outdoor noise levels at the site are predicted to be as high as 77 dBA, The project, therefore, would be subject to significant noise impacts.

<u>IMPACT NOISE-4</u>: The proposed project would be exposed to noise levels above the City's exterior noise goal of 60 dB L_{dn} and the interior noise goal of 45 dB L_{dn} . (Significant Impact)

2.4.3 General Plan Policies and Actions

Community Design Action Statement 2.5C.2f states to review project design to ensure minimum noise impacts to adjoining properties and reduce noise impacts from off-site sources, such as traffic.

Community Design Policy 3.6A.1 states that the City should consider noise standards in the evaluation of land use issues and proposals.

Community Design Action Statement 3.6A.1b states that the City should comply with state guidelines for the compatibility of land uses with their noise environments, except where the City determines that there are prevailing circumstances of a unique or special nature.

Community Design Policy 3.6A.2 states that the City should enforce and supplement state laws regarding interior noise levels of residential units.

⁸ Charles M. Salter Associates Inc. <u>Noise Report</u>. March 2005.

Link to Figure 13 Predicted Project Noise Levels

Community Design Action Statement 3.6A.2a states that the City should enforce Title 24 noise insulation requirements for all new hotels, motels, apartments, condominiums and other dwellings, including single-family detached units.

Community Design Action Statement 3.6A.2b states that the City should attempt to achieve a maximum instantaneous noise level of 50 dBA in bedrooms and 55 dBA in other areas of residential units exposed to train or aircraft noise, where the exterior L_{dn} exceeds 55 dB.

Community Design Action Statement 3.6A.3a states to use a combination of barriers, setbacks, site planning and building design techniques to reduce noise impacts, keeping in mind their benefits and shortcomings.

2.4.4 Mitigation and Avoidance Measures

The project proposes the following measures:

Mechanical Equipment

<u>MITIGATION MEASURE NOISE-1</u>: Select and locate mechanical equipment to meet City noise standards. If necessary, employ enclosures, acoustical louvers, and/or equipment noise attenuators.

MITIGATION MEASURE NOISE-2: Control noise from building mechanical systems, through acoustical louvers or baffles in air transmission paths, parapet walls, rooftop screen walls, and sound attenuators, so that it does not exceed 60 dBA at any residential property boundary.

MITIGATION MEASURE NOISE-3: Noise control measures included in the building mechanical systems will be reviewed and measurements will be made during the design phase by a qualified acoustical specialist to verify that noise impacts have been mitigated. The acoustical specialist will prepare a report for submittal to the City demonstrating that necessary treatments have been included in the design prior to issuance of a building permit.

Construction-Related Noise Impacts

<u>MITIGATION MEASURE NOISE-4</u>: Post signs at the construction site that include permitted construction days and hours, a day and evening contact number for the job site and day and evening contact number for the City in the event of problems.

<u>MITIGATION MEASURE NOISE-5</u>: Notify neighbors of the schedule and type of equipment that would be used for each phase of construction.

MITIGATION MEASURE NOISE-6: Limit construction hours to between 7:00 AM and 6:00 PM on weekdays, and between 8:00 AM and 5:00 PM on Saturdays.

<u>MITIGATION MEASURE NOISE-7</u>: Locate noisy stationary equipment (e.g., generators and compressors) away from the most sensitive adjacent uses.

<u>MITIGATION MEASURE NOISE-8</u>: Require that all construction equipment be in good working order and that mufflers are inspected for proper functioning.

<u>MITIGATION MEASURE NOISE-9</u>: Designate a construction noise coordinator. This coordinator shall be available to respond to complaints from neighbors and take appropriate measures to reduce noise.

<u>MITIGATION MEASURE NOISE-10</u>: If pile driving is required, implement site-specific noise and vibration attenuation measures under the supervision of a qualified acoustical consultant such as the following measures:

- Multiple pile drivers shall be considered to expedite this phase of project construction. Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.
- Temporary noise control blanket barriers shall shroud pile drivers. Such noise control blanket barriers can be rented and quickly erected.
- The contractor shall pre-drill pile holes to minimize the number of blows required to seat the pile for all piles driven within 200 feet of sensitive land uses. Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the pile. The associated noise reduction would be based on the soil conditions of the site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance.
- Notify land uses located within 200 feet of pile driving activities of the construction schedule in writing.

Exterior Noise Impacts

MITIGATION MEASURE NOISE-11: Construct a 10- to 15-foot sound barrier wall located along US 101 so as to block the line of sight from the pool area to vehicles on the freeway and reduce outdoor noise levels at the outdoor podium recreation area to meet the City's noise goal of 60 dB or less (refer to Figure 14).

The exact height, location, extent of a sound barrier wall should be determined during the design phase, when the site plan has been finalized. The barrier wall should be constructed of concrete block, plaster, pre-cast concrete, or other solid material with a minimum surface density of three pounds per square foot. Construction of a sound barrier wall along the US 101 right-of-way will be subject to design review and approval by the California Department of Transportation (Caltrans).

Interior Noise Impacts

<u>MITIGATION MEASURE NOISE-12</u>: Install sound rated windows and exterior wall assemblies to reduce interior noise levels to an L_{dn} of 45 dBA. Throughout most of the site, window sound insulation ratings between Sound Transmission Class (STC) 30 and STC 36

would be required. These ratings can be achieved using well sealed dual pane windows with various glazing configurations.

Buildings with the greatest exposure to noise from US 101 may require windows with sound insulation ratings of approximately STC 40, depending on the size and shape of windows and rooms. Windows with sound insulation ratings of STC 40 and greater typically have either dual sashes, or large airspaces between panes.

MITIGATION MEASURE NOISE-13: Complete a detailed analysis during the designlevel of the project to select appropriate windows and wall assemblies to meet interior noise standards. Sound rated exterior walls incorporating either resilient channels or double stud assemblies may also be required at the facades with the greatest noise exposure.

2.4.4 <u>Conclusion</u>

Implementation of the above mitigation measures will reduce construction and mechanical equipment noise impacts and will reduce exterior and interior noise levels to within state and local standards. (Less Than Significant Impact with Mitigation)

Link to Figure 14 Sound wall Location

2.5 AIR QUALITY

2.5.1 <u>Setting</u>

Air Pollution Climatology

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

Northwest winds and northerly winds are most common in Sunnyvale, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula towards Sunnyvale, particularly during the summer months. Winds are lightest on the average in fall and winter. Every year in the fall and winter, there are periods of several days when winds are very light and local pollutants build up.

Pollutants can be diluted by mixing in the atmosphere both vertically and horizontally. Vertically mixing and dilution of pollutants is often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of the time in both the morning and afternoon. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. While Sunnyvale itself has relatively flat terrain, the larger south bay sub-air basin has significant terrain features that affect air quality. The Santa Cruz Mountains and Hayward Hills on either side of the South Bay tend to restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula towards Sunnyvale.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution and terrain that restricts horizontal dilution give Sunnyvale a relatively high atmospheric potential for pollution.

Ambient Air Quality Standards

Criteria Pollutants

Both the USEPA and the California Air Resources Board have established air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 5 identifies the major criteria pollutants, characteristics, health effects and typical sources. The federal and state ambient air quality standards are summarized in Table 6.

Table 5 Major Criteria Pollutants						
Pollutant	Characteristics	Health Effects	Major Sources			
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors, primarily reactive hydrocarbons and oxides of nitrogen. Often called photochemical smog.	Eye irritation Respiratory function impairment	The major sources ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.			
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	Impairment of oxygen transport in the bloodstream Aggravation of cardiovascular disease Fatigue, headache, confusion, dizziness Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.			
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.			
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	Aggravation of chronic obstruction lung disease Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, industrial processes.			
Particulate Matter	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	Aggravation of chronic disease and heart/lung disease symptoms	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.			

Table 6 Federal and State Ambient Air Quality Standards								
Pollutant	Averaging	Federal Primary	State					
	Time	Standard*	Standard					
Ozone	1-Hour 8-Hour	0.12 PPM 0.08 PPM	0.09 PPM					
Carbon	1-Hour	35.0 PPM	20.0 PPM					
Monoxide	8-Hour	9.0 PPM	9.0 PPM					
Nitrogen Dioxide	Annual Average	0.05 PPM						
	1-Hour		0.25 PPM					
Sulfur Dioxide	Annual Average	0.03 PPM						
	24-Hour	0.14 PPM	0.05 PPM					
	1-Hour		0.25 PPM					
PM ₁₀	Annual Average	50 μg/m ³	20 μg/m ³					
	24-Hour	150 μg/m ³	50 μg/m ³					
Vinyl Chloride	24-Hour	0.01 PPM						
Notes: $PPM = Parts per Million; \mu g/m^3 = Micrograms per Cubic Meter$								

The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter (PM_{10} and $PM_{2.5}$).

The USEPA established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The existing 1-hour ozone standard of 0.12 PPM microns or less is to be phased out and replaced by an 8-hour standard of 0.08 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the US Supreme Court in a decision issued in February of 2001.

Suspended particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, soil cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. "Inhalable" PM consists of particles less than ten microns in diameter, and is defined as "suspended particulate mater" or PM_{10} . Fine particles are less than 2.5 microns in diameter ($PM_{2.5}$). $PM_{2.5}$, by definition is included in PM_{10} .

In 1997 new national standard for fine particulate matter (diameter 2.5 microns or less) were adopted for 24-hour and annual averaging periods. The current PM_{10} standards were to be retained, but the method and form of determining compliance with the standards were revised.

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, the California Air Resources Board (CARB) staff recommended lowering the level of the annual standard for PM_{10} and establishing a new annual standard for $PM_{2.5}$ (particulate matter 2.5 micrometers in diameter and smaller). The new standards became effective on July 5, 2003.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde.

Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Health effects of TACs include cancer, birth defects, neurological damage and death.

Ambient Air Quality

Criteria Air Pollutants

The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. The closest multi-pollutant monitoring site to the project site was located in downtown San José on Fourth Street.⁹ Table 6 summarizes exceedances of state and federal standards at this monitoring site during the period 2001-2003. Table 7 shows that ozone and PM_{10} exceed the state standards in the South Bay. Violations of the carbon monoxide standards had been recorded at the downtown San José site prior to 1992.

Of the three pollutants know to at time exceed the state and federal standards in the project area, two are regional pollutants. Both ozone and particulate matter (PM_{10} and $PM_{2.5}$) are considered regional pollutants in that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Thus, the data shown in Table 7 for ozone and PM_{10} provide a good characterization of levels of these pollutants on the project site.

Carbon monoxide is a local pollutant, i.e., high concentrations are normally only found very near sources. The major source of carbon monoxide is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

⁹ The San José Fourth Street station was closed for relocation on April 30, 2002. It reopened as San José Central on October 5, 2002

Toxic Air Contaminants

The state Air Resources Board and BAAQMD's inventory of TAC sources identifies 71 sources of TACs within Sunnyvale. The majority of these sources are microelectronic industries, dry cleaners, and auto repair businesses.

Of the 71 known TAC sources located in Sunnyvale, only Lockheed Missiles and Space was designated by BAAQMD as a high priority source based on the types and amounts of contaminants emitted. The results of the health risk assessment for this source classified this source as having a Level 0 impact, which is defined as a calculated maximum cancer risk of less than 10 in a million.¹⁰

Table 7 Summary of Air Quality Data For the San José Fourth Street/Central Stations*							
Pollutant	Standard	Days Exceeding Standard in:					
ronutant		2001	2002	2003			
Ozone	State 1-Hour	2	n/a*	4			
Ozone	Federal 1-Hour	0	n/a*	0			
Ozone	Federal 8-Hour	0	n/a*	0			
Carbon Monoxide	State-Federal 8-Hour	0	0	0			
Nitrogen Dioxide	State-Federal 1 Hour	0	0	0			
PM ₁₀	State 24-Hour	4	2	3			
PM_{10}	Federal 24-Hour	0	0	0			
PM _{2.5}	Federal 24-Hour	n/a [†]	0	0			

Notes:

* The San José Fourth Street station was closed for relocation on April 30, 2002. It reopened as San José Central on October 5, 2002, therefore, ozone statistics for San José Central in 2002 have been omitted.

[†] The San José Fourth Street station did not monitor for PM_{2.5}.

Source: California Air Resources Board, Aerometric Data Analysis and Management System, <u>www.arb.ca.gov/adam/</u>, 2004.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas." Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

In June of 1998, the USEPA reclassified the Bay Area from "maintenance area" to nonattainment area for ozone, based on violations of the federal standard at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone in 1995. Reclassification requires an update to the region's federal air quality plan.

¹⁰ City of Sunnyvale. <u>Air Quality Sub-Element of the General Plan</u>. July 1993. Page (3.7) 23.

Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and PM_{10} . The County is either an attainment area or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year period or if not, provide for adoption of "all feasible measures on an expeditious schedule."

Sensitive Receptors

The BAAQMD defines sensitive receptors as facilities where sensitive population groups (children, the elderly, the acutely ill and the chronically ill) are located. These land uses include residences, school playgrounds, child-care centers, retirement homes, convalescent homes, hospitals and medical clinics. Sensitive receptors near the project site include adjacent residential and hotel uses to the east and west.

2.5.2 <u>Air Quality Impacts</u>

Thresholds of Significance

General Plan Amendment

Based on BAAQMD guidelines, a General Plan or amendment to a General Plan is determined to be inconsistent with the most current Clean Air Plan (CAP), and therefore, to have a significant air quality impact, if the plan or plan change would:

- Result in population growth that would exceed the values included in the current Clean Air Plan (CAP) for the City of Sunnyvale; and
- Cause the rate of increase in vehicle miles traveled (VMT) to be greater than the rate of increase in population.

Specific Development Project

For the purpose of this project, an air quality impact is considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or project air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

General Plan Amendment Impacts

The project proposes to amend the General Plan to allow for the development of a new hotel and residential development. The proposed project would allow for an increase in the residential holding capacity allowed under build-out of the General Plan and thus, would increase population. The proposed project would also intensify the use of the project site, therefore, generating more traffic trips to and from the project site. The development of residential uses in Sunnyvale, however, would be would reduce commute travel time and distances. Since the in-commute of vehicles traveling to jobs in Sunnyvale from residences in distant locations contributes to the regional air quality problems, placing dwelling units in Sunnyvale would be expected to result in incremental benefits to regional air quality.

IMPACT AIR-1: Based on the discussion above, the proposed Specific Plan would not result in significant regional air quality impacts. (Less Than Significant Impact)

Specific Development Project Impacts

BAAQMD has established thresholds for what would be considered a significant addition to existing air pollution. A project that generates more than 80 pounds per day of reactive organic gases (ROGs) is considered to have a significant impact on regional air quality, according to the BAAQMD CEQA guidelines. In order to exceed the 80 pounds per day threshold, a typical project must generate at least 2,000 additional daily vehicle trips. BAAQMD generally does not recommend a detailed air quality analysis for projects generating less than 2,000 vehicle trips per day, unless warranted by the specific nature of the project setting.¹¹

The proposed project would allow for the development of a hotel and residential units on the site. As discussed in *Section 2.3 Transportation*, the proposed project would generate approximately 510 net new average daily trips.¹² Because the number of project-generated traffic trips falls well below BAAQMD's impact threshold, the project is assumed to result in a less than significant long-term air quality impact. However, the project would be adding housing that is not accounted for in the City's General Plan or the CAP and would therefore be inconsistent with the assumptions in the CAP.

Currently, the City has more jobs than housing: people working in Sunnyvale commute from neighboring cities because of the shortage of housing in the City. The project would provide Sunnyvale employees residing in other communities within the Bay Area and outlying areas with more local housing. It can be concluded, therefore, that commute lengths and vehicle miles traveled could be incrementally reduced by the proposed project, and the project would have a beneficial impact on air quality.

The proposed project will not create any objectionable odors.

<u>IMPACT AIR-2</u>: The proposed project would not result in significant long-term air quality impacts. In addition, the proposed project would incrementally reduce commute lengths and vehicle miles traveled, having a beneficial impact on air quality.

¹¹ Bay Area Air Quality Management District. <u>CEQA Guidelines</u>. December 1999.

¹² Walinski, Brett. "Re: Lakeside." E-mail to David J. Powers and Associates from Hexagon Transportation Consultants. 21 March 2005.

For this reason, the proposed specific development project would not result in significant air quality impacts. (Less Than Significant Impact)

Construction-Related Impacts

Construction activities would temporarily affect local air quality. Construction activities such as demolition, earthmoving, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water based paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

Construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

The effects of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant.

<u>IMPACT AIR-3</u>: Construction activities related to the proposed project would result in significant short-term air quality impacts. (Significant Impact)

2.5.3 General Plan Policies and Actions

Air Quality Policy A.1 states that the City should require all new development to utilize site planning to protect citizens from unnecessary exposure to air pollutants.

Air Quality Action A.1.c states that new residential development should be located at least 15 feet from the property line along major streets or intersections unless a lesser distance can be demonstrated to not expose residents to unhealthful pollutant concentrations.

Air Quality Policy C.2 states that the City should improve opportunities for citizens to live and work in close proximity.

Air Quality Action C.2.a states that in the long term, the City should encourage a better balance between jobs and housing than currently exists in Sunnyvale to reduce long distance commuting.

2.5.4 <u>Mitigation and Avoidance Measures</u>

The project proposes the following measures:

Construction-Related

The following construction practices would be implemented during all phases of construction on the project site.

<u>MITIGATION MEASURE AIR-1:</u> Use dust-proof chutes for loading construction debris onto trucks.

<u>MITIGATION MEASURE AIR-2</u>: Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.

<u>MITIGATION MEASURE AIR-3</u> Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.

<u>MITIGATION MEASURE AIR-4:</u> Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.

<u>MITIGATION MEASURE AIR-5</u>. Sweep streets daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).

<u>MITIGATION MEASURE AIR-6</u>: Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

<u>MITIGATION MEASURE AIR-7</u>: Replant vegetation in disturbed areas as quickly as possible.

<u>MITIGATION MEASURE AIR-8</u>: Address dust or complaints regarding dust within 24 hours to the satisfaction of City staff (or other authority).

2.5.5 <u>Conclusion</u>

The proposed project would not result in long-term air quality impacts. The proposed project, with the implementation of the above described mitigation measures, would reduce construction related air quality impacts to a less than significant level. (Less Than Significant Impact with Mitigation)

2.6 BIOLOGICAL RESOURCES

2.6.1 Setting

The project site is located within a developed area of the City of Sunnyvale. The project site is developed with a hotel, which consists of five, rectangular buildings and a main office and lobby building, and surface parking lots. Habitats in developed areas such as the site are extremely low in species diversity. Species that use this habitat are predominately urban adapted birds, such as rock dove, house sparrow, and starling.

Special Status Plants and Animals

Special status plants and animals include species listed under State and Federal Endangered Species Acts (including candidate species), animals designated as Species of Special Concern by the California Department of Fish and Game, and plants listed in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California.

Special status plants and animals that have been reported in the general project area are primarily associated with freshwater marsh, salt marsh, and aquatic habitats. These habitats are not present on the project site and, therefore, associated species such as the salt harvest mouse and California clapper rail, are not expected to occur on the project site. Special status animal species that use upland habitats near the bay include burrowing owl, tricolored blackbird, and song sparrow. The lack of natural plant communities, relatively small size of areas with plant cover, limited food sources, and extensive human disturbance reduce the habitat quality of the site. For these reasons, special status plant and animal species are not expected to occur on the project site.

City of Sunnyvale Tree Preservation Ordinance

The City of Sunnyvale Tree Preservation Ordinance defines a tree of significant size as any woody plant which has a trunk of 38 inches or greater in circumference, measured at four feet above the ground. A multi-trunk tree is considered a single tree and measurement of that tree includes the sum of the circumferences of tree trunks of that tree. A multi-trunk tree is considered to be of significant size if at least one trunk has a circumference of 38 inches or larger or if the sum of the circumference of all the trunks is 113 inches or greater.

A tree removal permit is required from the City for the removal of any significant size trees. A tree survey was completed by *Barrie Coate and Associates* in August 2004 and February 2005. The complete tree survey, including the species, size, health, and monetary evaluation of each tree, is included as Appendix F of this EIR. The project site has a total of 238 trees, 124 of which are of significant size. Figure 15 shows the location of each tree.

Link to Figure 15 Tree Survey

2.6.2 <u>Biological Resources Impacts</u>

Thresholds of Significance

For the purposes of this project, a biological resources impact is considered significant if the project will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflict with any local ordinances protecting biological resources, such as a tree preservation ordinance.

General Plan Amendment and Project Specific Development Impacts

Special-Status Plants and Animals

The site would continue to provide urban habitat for urban-adapted species with redevelopment of the project site. The entire project site has been previously disturbed by human use. There are no wetlands or other sensitive habitat on the project site. The presence of any special status plants or animals on site is unlikely; therefore, the project will not impact special status plants or animals.

Nesting Raptors

There are no known raptor nests on the site. There is the potential for nesting raptors (e.g., barn owls, red shouldered hawks, and Cooper's hawks) to be present, however, within the trees on and adjacent to the site at the time of redevelopment. Construction during the nesting season could disturb or destroy occupied nests, which would result in the loss of eggs or young birds. The value of the breeding habitat is not high due to the urban development on and adjacent to the site. The loss of trees, therefore, would not constitute a significant loss of breeding habitat for raptor species in the area. The loss of reproductive effort for individual birds would, however, be a significant impact.

<u>IMPACT BIO-1</u>: Construction activities during the nesting season may result in the disturbance or destruction of breeding raptors or their nests. (Significant Impact)

Significant-Size Trees

The project proposes to retain all the significant sized trees, a total of 49 trees, along the perimeter of the site. The project may, however, result in the loss of up to 189 trees, including 77 significant size trees. The project and any proposed tree removal would be required to conform to the City's Tree Preservation Ordinance (Municipal Code Chapter 19.94).

<u>IMPACT BIO-2</u>: The proposed Specific Plan could result in the removal of up to 189 trees, 77 of which are of significant size. (Significant Impact)

2.6.3 <u>Mitigation and Avoidance Measures</u>

The project proposes the following measures:

Nesting Raptors

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state laws and regulations. The federal Migratory Bird Treaty Act (16 U.S.C. 703, Suppl. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Birds of prey are protected in California under Fish and Game Code section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." In conformance with federal and state regulations regarding protection of raptors, the following California Department of Fish and Game protocols would be completed prior to any development to ensure that development does not result in the disturbance of nesting raptors:

MITIGATION MEASURE BIO-1: Preconstruction surveys shall be conducted no more than 30 days prior to the start of site grading. If nesting raptors are located on or immediately adjacent to the site, a construction-free buffer zone (typically 250 feet) around the active nest shall be established for the duration of breeding until young birds have fledged.

Trees

MITIGATION MEASURE BIO-2: The project shall conform to the City's Tree Preservation Ordinance (Municipal Code, Chapter 19.94). At the discretion of the Director of Community Development, significant trees that are to be removed shall be replaced, replanted, or relocated (Municipal Code, Sections 19.94.080, 19.94.090, and 19.94.100).

MITIGATION MEASURE BIO-3: A tree protection plan shall be completed. The plan shall demonstrate how tree protection shall be provided during and after construction and shall include any of the protective measures set forth in Section 19.94.120 of the Municipal Code.

2.6.4 Conclusion

With the implementation of the above mitigation measures, the proposed project would not result in significant impacts to biological resources. (Less Than Significant Impact with Mitigation)

2.7 CULTURAL RESOURCES

2.7.1 <u>Setting</u>

The project is located at an infill site in Sunnyvale. There are no recorded archaeological sites or reported cultural resources located in or near the project site. According to the City's Cultural Resources Inventory, there are no architectural or historically significant structures, significant trees, or local landmarks located on the site.¹³ No state and/or federal historically or architecturally significant structures, landmarks, or points of interest are located on or adjacent to the project site¹⁴

2.7.2 <u>Cultural Resources Impacts</u>

Thresholds of Significance

For the purposes of this project, a cultural resources impact is considered significant if the project will:

- Cause a substantial adverse change in the significance of a historic resource as defined in §15064.5 of the CEQA Guidelines;
- Cause damage to an important archaeological resource as defined in §15064.5 of the CEQA Guidelines;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

General Plan Amendment and Specific Development Project Impacts

There are no recorded archaeological sites within the project site. In addition, no listed, determined or pending local, State of California, or California Register of Historic Resources historic properties were located on or adjacent to the proposed project site.

Archaeological Resources

As mentioned above, there are no recorded archeological sites or reported cultural resources located on or adjacent to the project area. For this reason, construction of the proposed uses is not anticipated to result in the disturbance of any known buried archaeological resources. There is the potential, however, that unknown resources could be discovered during project construction, pile driving, or grading activities. Disturbance to such resources, should any be found, would be a significant impact.

¹³ City of Sunnyvale. <u>Heritage Resource Inventory</u>. December 2004. City of Sunnyvale. Local Landmarks. September 2004.

¹⁴ State of California. <u>Office of Historic Preservation</u>. 30 March 2005. <u>http://ohp.parks.ca.gov/default.asp?page_id=21522</u>.

National Park Service. <u>National Register of Historic Places</u>. 30 March 2005. <u>http://www.cr.nps.gov/nr/research/nris.htm</u>.

Lynch, Steve. City of Sunnyvale. Personal Communications. April 2005.

<u>IMPACT CULT-1:</u> Development of the project site could result in a significant impact to buried cultural resources which could be present on the site. (Significant Impact)

Historic Resources

The existing hotel buildings were constructed in 1979 and are not considered historically significant. In addition, no other listed, determined, or pending local, State of California, or California Register of Historic Resources historic properties are located on or adjacent to the project area. For these reasons, the project would not impact historic resources.

<u>IMPACT CULT-2:</u> Development of the project site would not impact historic resources. (No Impact)

2.7.3 Mitigation and Avoidance Measure

The project proposes the following measure:

Archaeological Resources

MITIGATION MEASURE CULT-1: In the event of the discovery of unanticipated prehistoric or historic era cultural materials, operations shall stop within 25 feet of the find and the Community Development Director will be notified. The find shall be evaluated by a qualified archaeologist, and if the find is significant, treatment recommendations shall be developed.

2.7.4 <u>Conclusion</u>

With the implementation of the above mitigation measure, the proposed project would not result in significant impacts to cultural resources. (Less Than Significant Impact with Mitigation)

2.8 GEOLOGY AND SOILS

The following discussion of the geologic features, soils, and seismic conditions on the project site is based on the Cooper-Clark *Geotechnical Investigation for the City of San José Sphere of Influence* (1974), the USGS *Generalized Geologic Map* (1975), the County of Santa Clara, Department of Public Works soil map sheet 12N/03 E 11 (1964), and the USDA *Soils of Santa Clara County* (1968). A geotechnical feasibility investigation was also completed by *Lowney Associates* in March 2005. The complete investigation is included as Appendix G of this EIR.

2.8.1 Setting

Topography and Soils

Sunnyvale lies at the southern end of San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. Sunnyvale's topography is generally flat, dropping from an elevation of 300 feet to sea level. Sunnyvale's soil is largely composed of expansive clays. Expansive clays are a poor foundation material because they swell when wet and shrink when dry, producing extensive cracks. The surface soils on the site consist of Castro clay (Cf), which has a high expansion potential.

The site is likely underlain by low to moderately expansive clays blanketing the site with interbedded layers of loose to very dense sands and stiff to very stiff, moderately compressible clays to a depth of approximately 100 feet. Very dense sand layers exist at depths of approximately 30 and 60 feet below the ground surface.

Groundwater in the project area has been encountered at depths ranging from approximately 7.5 feet to 12 feet below the ground surface. Fluctuations in the level of the ground water may occur due to variations in rainfall, underground drainage patterns, and other factors. A nearby site has a permanent dewatering system that draws down the groundwater table at the site; the zone of influence likely affects the northwest portion of the project site.

Seismicity and Seismic Hazards

The City of Sunnyvale is located within Santa Clara County, which is part of the seismically active San Francisco Bay Area. It is classified as Zone 4, the most seismically active zone in the United States. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions.

The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, nor is it located within a Fault Rupture Hazard Zone as designated by Santa Clara County. Since no known active faults cross the site, fault rupture through the site is not anticipated.

The major fault lines in the region are the San Andreas Fault and the Hayward Fault. The San Andreas Fault is located approximately 10 miles southwest of the project site and the Hayward Fault is located approximately 10 miles to the northeast of the project site. Other active faults in the site region are the potentially active Monte Vista-Shannon Fault, located approximately seven miles southwest of the site, the Hayward Southeast Extension, located approximately eight miles northeast of the site, and the Calaveras Fault, located

approximately 11 miles northeast of the site. Because of the proximity of the site to these faults, any ground shaking, ground failure, liquefaction, or lateral spreading due to an earthquake could cause damage to structures.

Ground Shaking

Ground shaking is the most widespread effect of an earthquake. The sudden release of energy in an earthquake causes waves to travel through the earth. These waves not only shake structures to the breaking point, but can trigger secondary effects such as landslides or other types of ground failure. Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. This is common to all developments in the San Francisco Bay Area.

Given the flat nature of the site, landslide potential on the site is low.

Ground Failure

Most ground failure from earthquake shaking results in displacement in the surface due to loss of strength of underlying materials. The various types of ground failure include landsliding, liquefaction, lateral spreading, lurching, and differential settlement. These effects usually occur in soft, fine-grained, water-saturated alluvium, as generally found in the Santa Clara Valley. Due to the type of soils on the site, ground failure potential at the site is low.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction including the age of the soil, soil type, soil cohesion, soil density, and ground water level.

The site is located within an area zoned by the State of California as having potential for seismically induced liquefaction hazards and is located in a Santa Clara liquefaction hazard zone.

Differential Seismic Compaction

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of soil strata, resulting in movement of near-surface soils. The subsurface soils encountered in the project area are generally stiff to very stiff clays and loose to very dense sands. Because the groundwater elevations will vary across the site due to the draw-down at a nearby site, settlements related to seismic shaking of unsaturated sands may also vary across the site.

Lateral Spreading

Lateral spreading failures occur most commonly on gentle to nearly horizontal slopes underlain by loose to moderately dense granular deposits or layers. Cracks, fissures, and differential settlement usually accompany this effect, which has proved to be damaging and disruptive to structures and utilities. A man-made lake is located along the southern boundary of the project site. The lake is concrete lined and approximately three feet deep or less. Since the shallow man-made lake does not influence the nearby groundwater levels, the probability of lateral spreading at the site is considered low.

2.8.2 Geology and Soils Impacts

Thresholds of Significance

For the purposes of this project, a geologic or seismic impact is considered significant if the project will:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
 - Strong seismic ground shaking,
 - Seismic-related ground failure, including liquefaction, and/or
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

General Plan Amendment and Specific Development Project Impacts

Soils

Future development on the site is not expected to be exposed to slope instability, erosion, or landslide-related hazards, due to the flat topography of the site. The project site includes highly expansive soils, which may expand and contract as a result of seasonal or man-made soil moisture conditions. Expansive soil conditions could potentially damage the future buildings and improvements on the site which would represent a significant impact unless substantial damage is avoided by incorporating appropriate engineering into grading and foundation design.

Standard Requirements

The project would be required to be constructed in accordance with the standard engineering practices in the Uniform Building Code, which would ensure that future buildings on the site are designed properly to account for the expansive soils on the site. The presence of expansive soils on the site, therefore, would not represent a significant impact to future development on the site.

IMPACT GEO-1: Due to the expansion potential of the soils on the site, the project could expose people and structures to significant geological hazards. However, implementation of standard grading and best management practices (BMPs) would prevent soils conditions on the site from significantly impacting future development. (Less Than Significant Impact)

Seismicity and Seismic Hazards

As previously discussed, the project site is located in a seismically active region, and therefore, strong ground shaking would be expected during the lifetime of the proposed project. While no active faults are known to cross the project site, ground shaking on the site could damage future buildings and other structures, and threaten the welfare of future patrons and residents. The project site is also susceptible to liquefaction and differential compaction.

The ground failure and lateral spreading potentials are considered low.

Standard Requirements

The proposed project would be designed and constructed in conformance with the Uniform Building Code guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking and seismic-related hazards, including liquefaction, on the site. Potential impacts associated with future exposure to the proposed project, therefore, would be reduced or avoided by conformance with the standards specified in the Uniform Building Code for Seismic Zone 4. For this reason, the project would not be subject to significant impacts from seismic-related hazards.

<u>IMPACT GEO-2</u>: While the project site is subject to strong seismic ground shaking, like the rest of the Bay Area, potential impacts associated with future exposure to the proposed project would be reduced or avoided by conformance with the standards specified in the Uniform Building Code for Seismic Zone 4. (Less Than Significant Impact)

IMPACT GEO-3: There is potential for liquefaction and differential compaction to occur on the site. (Significant Impact)

2.8.3 <u>Mitigation and Avoidance Measures</u>

The project proposes the following measure:

MITIGATION MEASURE GEO-1: A detailed design-level geotechnical investigation shall be completed and the project design and construction shall follow the recommendations of the investigation. The design-level investigation shall include subsurface exploration at the site (to address the liquefaction potential at the site) and evaluation of appropriate foundation systems for proposed structures, as well as site preparation and pavement design.

Due to the depth of groundwater in the project area, the investigation will also address any need for dewatering during construction. If dewatering is required, this report will also identify the amount and depth of dewatering and the specifics regarding disposal of the water.

2.8.4 Conclusion

Development of the proposed project, in conformance with the standard requirements stated above and with the implementation of the recommendations in the feasibility investigation and in the design-level geotechnical investigation to be prepared for the project, would not result in significant geological impacts. (Less Than Significant Impact with Mitigation)

2.9 HYDROLOGY AND WATER QUALITY

2.9.1 <u>Setting</u>

Drainage and Flooding

There are no waterways present on the site. There is a man-made lake along the length of the southern border of the project site. The nearest waterway is Calabazas Creek, which is located approximately 0.2 miles to the east of the project site. There are existing 15-inch, 42-inch, and 72-inch storm drainage lines along Lakeside Drive, as well as six-inch and 12-inch storm drain lines located through the project site. Runoff from the site eventually drains to the Calabazas Creek. The site consists of 85 percent (7.51 acres) impervious surfaces and 15 percent (1.32 acres) pervious surfaces. The existing storm water runoff from the site is approximately 12.40 cubic feet per second (cfs) for a 10-year storm and 17.23 cfs for a 100-year storm.¹⁵

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, the site is located within Zone AO, which is defined as a zone where the 100-year flood is expected to cause sheet flooding at depths between one to three feet.¹⁶ The elevation in the project area is approximately 24 feet National Geodetic Vertical Datum (NGVD).¹⁷ The project site is not within any dam failure inundation area.¹⁸ The site is not subject to tsunami.¹⁹

Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as "non-point" source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Storm water runoff from the road is collected by storm drains and discharged into Calabazas Creek. The runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

¹⁶ City of Sunnyvale. <u>Sunnyvale Properties Within Flood Zones</u>. 14 February 2005.

http://sunnyvale.ca.gov/Departments/Public+Works/Flood+Zone/. Flood zone information based upon FEMA FIRM Community Panel #060352 0001D, 19 December 1997.

¹⁵ BKF. <u>Storm Water Flow Calculations</u>. 10 February 2005.

¹⁷ Federal Emergency Management Agency. <u>Flood Insurance Rate Map</u>. Community Panel #0603520001D. 19 December 1997.

¹⁸ Association of Bay Area Governments. <u>Dam Failure Inundation Hazard Map for Sunnyvale</u>. 20 October 2003. ABAG. 18 February 2005. <u>http://www.abag.ca.gov/cgi-bin/pickdamz.pl</u>.

¹⁹ Association of Bay Area Governments. <u>Tsunami Hazard Map</u>. 12 August 2004. California Office of Emergency Services. 18 March 2005. <u>http://www.abag.ca.gov/bayarea/eqmaps/tsunami/tsunami.html</u>.

Regulatory Overview

The major federal legislation governing water quality is the Clean Water Act, as amended by the Water Quality Act of 1987. The USEPA is the federal agency responsible for water quality management nationwide.

The State of California's Porter-Cologne Water Quality Control Act provides the basis for water quality regulation within California; the Act assigns primary responsibility for the protection and enhancement of water quality to the State Water Resources Control Board (SWRCB), and the nine regional water quality control boards. The SWRCB provides state-level coordination of the water quality control program by establishing state-wide policies and plans for the implementation of state and federal laws and regulations. Each Regional Water Quality Control Board (RWQCB) adopts and implements a water quality control plan ("Basin Plan") that recognizes the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems (refer to *Section 1.6 Consistency with Relevant Plans and Policies*). The City of Sunnyvale is within the San Francisco Bay Region Water Quality Control Board.

The State Water Resources Control Board has implemented a National Pollution Discharge Elimination System (NPDES) general construction permit for the Santa Clara Valley. For properties of one (1) or more acres, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation. Subsequent to implementation of the general construction permit, the San Francisco Bay RWQCB issued a Municipal Storm Water NPDES Permit to the municipalities in Santa Clara Valley, the County of Santa Clara, and the Santa Clara Valley Water District (SCVWD) as co-permittees. The Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) assists the co-permittees in implementing the provisions of this permit.

The October 2001, the RWQCB approved an amendment to the NPDES Permit Number CAS 029718, Provision C.3. The amendment to Provision C.3 includes new storm water discharge requirements for new development and redevelopment within the boundaries of the 15 jurisdictions/co-permittees that constitute SCVURPPP, including the City of Sunnyvale, that create, add, or replace one acre or more of impervious surface area on the project site.

The City is currently working on preparation of the Hydrograph Modification Management Plan (HMP) Program with the other Santa Clara County co-permittees, provision of which will be implemented in the next few years.

2.9.2 Hydrology and Water Quality Impacts

Thresholds of Significance

For the purposes of this project, a hydrology and water quality impact is considered significant if the project will:

- Violate any water quality standards or waste discharge requirements;
- Substantially degrade or deplete groundwater resources or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Provide substantial additional sources of polluted runoff or otherwise substantially degrade surface or groundwater quality;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

General Plan Amendment and Specific Development Project Impacts

Drainage and Flooding

The proposed specific development project would result in the site being 65 percent (5.70 acres) impervious and 35 percent (3.13 acres) pervious (refer to Figure 16). The project would result in a 20 percent (1.81 acres) reduction in impervious surfaces on the site, therefore, the proposed project would result in the reduction of runoff compared to existing conditions. The predicted storm water runoff from the proposed project is 9.80 cfs for a 10-year storm and 13.61 cfs for a 100-year storm.²⁰ The net decrease in impervious surfaces on the site and the installation of treatment Best Management Practices (BMPs) (see below) will also result in a decrease in stormwater flows to Calabazas Creek. For these reasons, it is not anticipated that the proposed project will be required to install storm drain lines and facilities for collecting and managing storm water runoff, in conformance with City policies.

As mentioned above, the project site is located in Zone AO. If a 100-year flood were to occur, the site is expected to be subject to flood depths between one and three feet. The

²⁰ BKF. <u>Storm Water Flow Calculations</u>. 10 February 2005.

Link to Figure 16 Proposed Pervious and Impervious Surfaces

project would be required to construct buildings with the first floors at or above the 100-year flood elevation (above the flood plain) to avoid impacts related to flooding. The elevation of the project area is approximately 24 feet and the finished floor for the proposed hotel would be 27.7 feet and 28.2 feet for the proposed condominium buildings. Therefore, the project would be constructed above the flood plain. The construction of the proposed project will conform to the FEMA flood zone standards and the City of Sunnyvale Municipal Code related to construction in Zone AO (Municipal Code Chapter 16.62). For these reasons, the project would not result in significant flooding impacts.

IMPACT HYDRO-1: The proposed project would reduce storm water runoff from the site compared to existing conditions, and would not exceed the City's storm drain system capacity. The project includes design measures to avoid flooding impacts. (Less Than Significant Impact)

Water Quality

Storm water from urban uses contains metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. Runoff from future development on the site may contain oil and grease from parked vehicles, and sediment from the landscaped areas.

Development on the project site would be required to utilize structural and non-structural control measures and management practices to minimize the addition of pollution to the storm water system, and comply with a hydromodification management program approved by the RWQCB.

The project specifically proposes to include the following BMPs:

During Construction

- Install silt fence and fiber rolls around project site;
- Temporary seeding and mulching for erosion and dust control;
- Stabilizing disturbed soil surface for dust control;
- Install fiber rolls (sediment logs or wattles) along face of cut/fill slopes and drainage swales;
- Stabilizing point of ingress/egress to minimize the tracking of dirt onto public roads;
- Install entrance/exit tire wash area;
- Install storm drain inlet protection (gravel, filter fabric, fiber rolls, etc.);
- Set up area for cleaning/wash construction equipment and vehicles; and
- Set up area for delivery, handling, and storage of hazardous materials.

Post Construction

- Pipe roof runoff underground to lawn areas;
- Install grasscrete paving (pervious pavement) for the fire lane along the southern boundary of the project site (refer to Figure 17);
- Incorporate vegetated swales (refer to Figure 17);
- Incorporate bioretention (refer to Figure 17); and

• Install vortex separators.²¹

The project applicant will be required to obtain an NPDES permit at the time of construction and measures will be required to control both storm water quantity and quality during and after construction. With incorporation of these measures as part of the project, the project would not result in significant water quality impact.

<u>IMPACT HYDRO-2</u>: Runoff from the proposed project would contain urban pollutants, such as oil, grease, and metals that could impact water quality in local drainage systems receiving storm water runoff. Development of the proposed project could cause a significant temporary increase in the amount of contaminants in storm water runoff during construction. However, the project specifically proposes the incorporation of the above measures and development in accordance with the NPDES requirements listed below, which would avoid significant water quality impacts. (Less Than Significant Impact)

2.9.3 General Plan Policies and Actions

Drainage and Flooding

Surface Runoff Action Statement 3.4C.2d states that the City should continue to maintain the flood plain management practices outlined by the FEMA and the Army Corps of Engineers.

Surface Runoff Policy 3.4D.1 states that the City should consider the impacts on the water quality of surface runoff as part of land use and development decisions and implement BMPs to minimize the total volume and rate of runoff.

Surface Runoff Policy 3.4D.2 states that the City should consider the ability of a land parcel to detain excess storm water runoff in flood prone areas and require incorporation of appropriate controls.

Surface Runoff Action 3.4D.2a states that land use decisions should also consider the ability of a parcel to detain excess storm water in areas prone to flooding through use of oversized collection systems and detention facilities.

Water Quality

Surface Runoff Action Statement 3.4A.3i states that the City should modify new development and re-development permitting procedures to require developers and contractors to implement BMPs before, during, and after construction to minimize pollutants discharged in storm water runoff.

Surface Runoff Action Statement 3.4D.1a states that the City should study and determine the appropriateness of a particular parcel of land to support selected BMPs for removing pollutants prior to discharge.

²¹ Vortex separators are gravity separators that remove suspended sediments and attached pollutants in stormwater. California Stormwater Quality Association. <u>California Stormwater BMP Handbook</u>. January 2003. 30 March 2005. <u>http://www.cabmphandbooks.com/Documents/Development/MP-51.pdf</u>.

Link to Figure 17 Location of Grasscrete Pavement, Vegetated Swales, and Bioretention Areas

Surface Runoff Action Statement 3.4D.1b states that the City should assure that all applicable development projects obtain coverage under the State Water Board's general construction activity storm water NPDES permit.

2.9.4 Mitigation and Avoidance Measures

The project proposes the following measures:

Water Quality

MITIGATION MEASURE HYDRO-1: Prior to construction of any phase of the project, the City of Sunnyvale will require that the applicant(s) submit a Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to the State of California Water Resource Quality Control Board to control the discharge of storm water pollutants including sediments associated with construction activities. Along with these documents, the applicant may also be required to prepare an Erosion Control Plan. The Erosion Control Plan may include Best Management Practices (BMPs) as specified in the California Storm Water Best Management Practice Handbook for reducing impacts on the City's storm drainage system from construction activities. The SWPPP shall include control measures during the construction period for:

- Soil stabilization practices
- Sediment control practices
- Sediment tracking control practices
- Wind erosion control practices and
- Non-storm water management and waste management and disposal control practices.

MITIGATION MEASURE HYDRO-2: Prior to issuance of a grading permit, the applicant will be required to submit copies of the NOI and Erosion Control Plan (if required) to the City Project Engineer, Department of Public Works. The applicant will also be required to maintain a copy of the most current SWPPP on-site and provide a copy to any City representative or inspector on demand.

MITIGATION MEASURE HYDRO-3: Each phase of development will include provision for post-construction structural controls in the project design where feasible, and would include Best Management Practices (BMP) for reducing contamination in storm water runoff as permanent features of the project. BMPs and design features could include regular sweeping of parking lots and driveways; use of erosion control devices such as silt fences; biofilters; and stenciling on-site catch basins to discourage illegal dumping.

MITIGATION MEASURE HYDRO-4: The project shall comply with Provision C.3 of NPDES Permit Number CAS029718, Order #01-119, which provides enhanced performance standards for the management of storm water for new development. (Refer to *Section 1.6 Consistency with Adopted Plans and Policies*, of this EIR, for description of these requirements.)

<u>MITIGATION MEASURE HYDRO-5</u>: The applicant, their arborist and landscape architects, shall work with the City and the SCVURPPP to select pest resistant plants to minimize pesticide use, as appropriate.

MITIGATION MEASURE HYDRO-6: The project shall comply with the City Storm Water Management Ordinance (Municipal Code Chapter 12.60).

2.9.5 Conclusion

With the implementation of the above measures, which are included as part of the project, the proposed project would not result in significant hydrology or water quality impacts. (Less Than Significant Impact)

2.10 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on a soil and soil gas investigation completed by *Erler & Kalinwoski, Inc.* in June 2005. A complete copy of this report is included is Appendix H of this EIR.

2.10.1 Setting

Hazardous materials are commonly used by large institutions, commercial, and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

The project site has been occupied with a hotel since approximately 1980. Prior to that time, the site was undeveloped or used for agricultural purposes. Historical applications of pesticides and herbicides may have occurred on-site. The project site is also located at the northern boundary of an area where chemical impacts to groundwater have occurred, primarily as a result of chemical releases from National Semiconductor Corporation (NSC) and Advanced Microdevices (AMD). The northern boundary of the project site has been designated by the Regional Water Quality Control Board (RWQCB) as Operable Unit 1 (OU1). OU1 is an area where chemical impacts to groundwater have occurred primarily as a result of chemical releases from NSC and AMD.

The primary chemicals of concern in OU1 are Volatile Organic Chemicals (VOCs), which were used as solvents in semiconductor manufacturing processes. The most prevalent chemical of concern detected in groundwater within the OU1 is trichloroethene (TCE). The project site, however, is located at the very northern (i.e., downgradient) boundary of the OU1, where chemical concentrations in groundwater are the lowest.

Groundwater Levels and Chemical Data

There are multiple groundwater aquifer zones beneath the OU1 and the project site. An analysis of data provided by NSC indicates that only two aquifer zones have been impacted by chemicals of concern in the vicinity of the project site. There are no groundwater monitoring wells or groundwater chemical data collected at the project site, however, concentrations of up to approximately 100 micrograms per liter (ug/l) of total VOCs have historically been detected in wells located immediately west of the project site (across from Lakeside Drive).

Soil and Soil Gas Sampling

Soil gas samples were collected from six locations on the site and were analyzed for volatile organic compounds. Soils were collected from 21 locations on the site and were analyzed for pesticides, herbicides, lead, and arsenic. Shallow soil samples were taken at 0.5 to one foot below ground surface (ft bgs) and deep soil samples were taken at 2.5 to three ft bgs. A summary of the findings are provided below:

Soil Gas

Several compounds were detected in the shallow soil gas samples, including petroleumrelated compounds toluene and xylenes, Freon 113, chloroform, and chlorobenzene. TCE, the primary compound of concern at the NSC plume, was not detected at the project site. The source of the detected chemicals is not known. All of the concentrations detected were significantly below the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs) and the California Environmental Protection Agency (Cal-EPA) California Human Health Screening for soil gas at residential sites.

Herbicides in Shallow Soil

No herbicides were detected in any of the soil samples.

Pesticides in Shallow Soil

DDT and its breakdown products (DDE and DDD) were detected in shallow soil samples at the site. DDT, DDE, and DDD were detected in soil samples at a maximum concentration of 0.207 mg/kg, which is below the residential soil ESL of 1.6 mg/kg for DDT and DDE, and 2.3 mg/kg for DDD.

Chlordane, another pesticide, was either not detected or below the ESL in all but one of the soil samples at the site. One sample contained chlordane at a concentration of 1.27 mg/kg, which exceed the residential ESL of 0.44 mg/kg (refer to Appendix H). Chlordane was commonly used for termites, cockroaches, and other insects. Therefore, chlordane use on the site could be attributed to either the existing hotel or historical agricultural uses.

Given the presence of chlordane above the residential soil ESL, deeper soil samples were collected and analyzed for chlordane. No chlorinated pesticides were detected in the deeper soil sample from the location where the elevated concentration of chlordane was found.

To further assess the presence of chlordane, shallow soil samples were taken from 15 additional locations in the vicinity of the proposed residential development on the project site (refer to Appendix H). Concentrations of chlordane were detected at up to 2.55 mg/kg, which exceeds the residential ESL of 0.44 mg/kg.

Lead and Arsenic in Shallow Soil

Arsenic was detected at or below background concentrations, which are typical for the Santa Clara Valley, in all soil samples on the site. Lead was also present at typical background levels in all soil samples, except at one location. The concentration of lead at this location was 71.9 mg/kg, which is less than the residential soil ESL for lead of 150 mg/kg.

Asbestos-Containing Building Materials (ACBMs) and Lead-Based Paint

Based on the age of the existing buildings on the site, it is possible that asbestos-containing building materials (ACBMs) were utilized in construction. Asbestos containing materials are of concern because exposure to them has been linked to cancer.

Lead-based paint is of concern, both as a source of direct exposure through ingestion of paint chips, and as a contributor to lead interior dust and exterior soil. Lead was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents from the early 1950's. In 1972, the Consumer Products Safety Commission limited lead content in new paint to 0.5 percent (5000 ppm) and in 1978, to 0.06 percent (600 ppm).

2.10.2 Hazards and Hazardous Materials Impacts

Thresholds of Significance

For the purposes of this project, a hazardous materials impact is considered significant if the project will:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

General Plan Amendment and Specific Development Project Impacts

Groundwater and Soil Contamination

Although TCE may be present in groundwater at or near the project site due to the existing neighboring NSC plume, TCE was not detected in shallow soil gas samples at the site. Other VOCs that were detected in soil gas at the site are below the residential soil gas ESLs and, therefore, would not result in significant adverse health risks to future residents at the site as a result of chemicals volatizing from groundwater.

Herbicides were not detected in soil samples from the project site, and of the pesticides detected at the project site, only chlordane was found above residential soil ESLs. Chlordane detections at the project site are likely the result of legal applications from either historical

agricultural uses or operation of the existing hotel. Overall, chlordane concentrations in soil above residential ESLs do not appear to be widespread across the project site. However, the presence of chlordane above residential ESLs could impact future residents at the site. (It should be noted that site grading during redevelopment could result in the mixing of soil such that resultant site-wide chlordane concentrations might be below residential ESLs for chlordane in soil.)

<u>IMPACT HAZ-1</u>: The proposed project would not result in significant impacts related to groundwater contamination. Concentrations of chlordane were detected in on-soils above residential ESLs. (Significant Impact)

Asbestos-Containing Building Materials (ACBMs) and Lead-Based Paint

Due to the age of the existing buildings on the site, ACBMs may be present. Since demolition of the existing buildings would be part of the project, National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines require that all potentially friable ACMs be removed prior to building demolition or renovation that may disturb the ACM.

Demolition of buildings which contain lead-based paint could create lead-based dust at concentrations which would expose workers and nearby receptors to potential health risks. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing lead-based paint. If the lead-based paint is peeling, flaking, or blistered, it would need to be removed prior to demolition. It is assumed that such paint would become separated from the building components during demolition activities; and must be managed and disposed of as a separate waste stream. If the lead based paint is still bonded to the building materials, its removal is not required prior to demolition.

Demolition of the existing residence may expose construction workers, residents, or school children in the vicinity to harmful levels of lead or ACMs. The project proposes to conform to the following regulatory programs and to implement the following measures to reduce potential impacts due to the presence of ACMs and/or lead-based paint to a less than significant level:

- As appropriate, a lead survey of painted surfaces and soil around the residence shall be performed prior to demolition. Requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, CCR 1532.1 would be followed during demolition activities, including employee training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.
- All potentially friable ACMs shall be removed in accordance with the NESHAP guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with OSHA standards contained in Title 8 of the CCR, Section 1529, to protect workers from exposure to asbestos. Specific measures could include air monitoring during demolition and the use of vacuum extraction for asbestos-containing materials.

- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one (1) percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one (1) percent asbestos shall be completed in accordance with BAAQMD requirements.

IMPACT HAZ-2: The proposed project, with the implementation of the above standard measures, would not result in significant impacts related to the presence of ACBMs or lead-based paint. (Less Than Significant Impact)

Other Hazards

The project site is not located within the Santa Clara County Airport Land Use Commission (ALUC) jurisdiction, nor is it on one of the City's designated evacuation routes. The site is not located within an area subject to wildfires. The project does not propose any on-site use of hazardous materials other than small amounts of herbicides and pesticides. The storage and use of these materials would not result in a significant hazardous materials impact.

IMPACT HAZ-3: The proposed project would not result in safety hazards or impacts related to wildfires or the on-site use and/or storage of hazardous materials. (Less Than Significant Impact)

2.10.3 Mitigation and Avoidance Measures

The project proposes the following measure:

MITIGATION MEASURE HAZ-1: The project applicant shall present the soil sampling results to the Santa Clara County Department of Environmental Health prior to issuance of the demolition permit. The Santa Clara County Department of Environmental Health shall determine whether remediation is required to address chlordane in soils on the site. All requirements of the Santa Clara County Department of Environmental Health shall be followed, and any remediation of chlordane shall be completed in accordance with all overseeing regulatory agency requirements and all federal, state, and local regulations.

If soil remediation is needed, it would likely consist of soil excavation, soil mixing, and/or capping of the soil with non-contaminated soil. Remediation, if any, shall be performed by a licensed hazardous waste remediation contractor under the oversight of a professional engineer or registered geologist.

2.10.4 Conclusion

The proposed project, with the implementation of the above mitigation measure, would not result in significant hazards or hazardous materials impacts. (Less Than Significant Impact with Mitigation)

2.11 UTILITIES AND SERVICE SYSTEMS

2.11.1 Setting

Water Service

The City of Sunnyvale and the California Water Company (CALwater) provide water to Sunnyvale residents and businesses. The City has four different sources of water supply available: 1) local groundwater from nine operating wells, 2) imported Central Valley Project and Delta water from the Santa Clara Valley Water District (SCVWD), 3) Hetch Hetchy and Sunol Valley water supply from the San Francisco Public Utilities Commission (SFPUC), and 4) recycled water produced at the Sunnyvale Water Pollution Control Plant for non-potable use.²² There is a 12-inch water line along Lakeside Drive and an eight-inch water line located on the project site, along the northern boundary of the site.

It is estimated that the domestic water usage for the existing site is approximately 62,370 gallons per day (gpd).²³

Wastewater Treatment/Sanitary Sewer

The Sunnyvale Water Pollution Control Plant (WPCP) provides wastewater treatment, manages storm water discharges to local streams and channels, and regulates industrial and commercial discharges to the sanitary sewer system. The current influent flow to the WPCP is 14.8 million gallons of sewage a day.

There is a 12-inch sanitary sewer main along Lakeside Drive as well as six, eight, and 10inch sewer lines throughout the project site that connect to the 12-inch line along Lakeside Drive. The existing 12-inch sewer main has a capacity of 891,917 gpd. Typically, wastewater is 85 percent of water usage, therefore, it is estimated that the waste water flow for the existing site is approximately 53,015 gpd.

Storm Drainage Systems

The City provides and maintains storm drainage lines in the project site area. The City's storm drain system is for the control of flooding only, and the water that enters the drains is not treated before emptying into local creeks that flow to South San Francisco Bay. There are 42-inch and 72-inch storm drain lines along Lakeside Drive, and there are 12-inch and 15-inch storm drain lines within the project site that connect to the 42-inch and 72-inch lines along Lakeside Drive.

It is estimated that the storm water flow from the existing site would be 12.40 cfs for a 10-year storm and 17.23 cfs for a 100-year storm.²⁴

²² City of Sunnyvale. <u>Field Services: Water Supply</u>. 2 February 2005.

http://sunnyvale.ca.gov/Departments/Public+Works/Water+Supply/.

²³ BKF Engineers. Domestic and Waste Water Flow Analysis. 10 February 2005.

²⁴ BKF Engineers. <u>Storm Water Flow Calculations</u>. 10 February 2005.

Solid Waste

State law AB 939 required that California cities divert 50 percent of their waste from landfill disposal by the year 2000. The City of Sunnyvale met that 50 percent goal in 1996, and is now working to maintain or exceed its current 56 percent diversion rate.²⁵

An important component of the City's diversion effort for franchised wastes is the Sunnyvale Materials Recovery and Transfer Station (SMaRT), where recyclables and yard trimmings are sorted, processed and marketed. The remaining garbage is hauled to Kirby Canyon Landfill in San José for disposal.²⁶ In 2004, the remaining capacity at Kirby Canyon Landfill was 5,081,867 tons of waste. It is officially estimated that Kirby Canyon Landfill will reach capacity by 2022.²⁷ However, the Kirby Canyon site has the potential for significant expansion beyond that date, so long as the site operator wishes to continue and can obtain necessary regulatory approvals. In 2004, the City was allocated to dispose 138,301 tons of waste at Kirby Canyon Landfill; it delivered 89,007 tons.²⁸

Solid waste and recycling collection services for residences and businesses in Sunnyvale are provided by the City by way of a franchised service provider, and wastes generated by the project would be removed by the franchised hauler. Generally during construction and demolition of large projects, significant quantities of waste are generated. An exclusion to the franchise, however, allows construction and demolition contractors to remove wastes generated during their work using their own vehicles and employees. Because of the large amount of construction and demolition waste typically generated by large projects, and because the City does not control waste hauled under this exclusion, there is potential for large amounts of demolition and construction debris to be disposed at landfills.

Electricity and Natural Gas Services

Electric and natural gas service is currently provided to the existing hotel on the site by Pacific Gas and Electric. There is a five-inch natural gas line through the property.

2.11.2 <u>Utilities and Service Impacts</u>

Thresholds of Significance

For the purposes of this project, a utility impact is considered significant if the project will:

• Require or result in the construction of a new storm water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

²⁵ City of Sunnyvale. <u>Solid Waste and Recycling</u>. 14 March 2005.

http://sunnyvale.ca.gov/Departments/Public+Works/Solid+Waste+and+Recycling/home.htm#Goals. ²⁶ City of Sunnyvale. <u>Solid Waste and Recycling</u>. 14 March 2005. http://sunnyvale.ca.gov/Departments/Public+Works/Solid+Waste+and+Recycling/home.htm#Goals.

 ²⁷ State of California Integrated Waste Management Board. <u>Active Landfills Profile for Kirby Canyon Recycl. &</u> <u>Disp. Facility (43-AN-0008)</u>. 30 March 2005.

http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=41&FACID=43-AN-0008.

²⁸ Bentley, Gail. "Re: Capacity at Kirby Canyon Landfill." E-mail to David J. Powers and Associates from City of Sunnyvale, Department of Public Works, Solid Waste Division, Operations Specialist.

- Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Need new or expanded entitlements for water supplies;
- Be served by a landfill with insufficient permitted capacity;
- Generate waste before or after project completion in a quantity sufficient to negatively affect the City's compliance with State law or Solid Waste Goal 3.2B; or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

General Plan Amendment and Specific Development Project Impacts

The project site is currently occupied by a 378-room hotel with an estimated 1,134 guests at full occupancy. The project is proposing to demolish the existing 378-room hotel and redevelop the site with a new hotel with up to 263 rooms, a residential development with up to 251 units, and up to 3,000 square feet of convenience retail. The proposed hotel is estimated to have 789 guests at full occupancy and the residential development is assumed to have a total of 533 residences.²⁹

Water Service

A domestic and waste water usage analysis was completed for the project. The complete analysis is included in Appendix I of this EIR. The total estimated domestic water use for the project is 222,825 gallons per day. Development of the project would result in water usage at the site increasing by 160,455 gallons per day. The City has sufficient water supply to serve the proposed project.³⁰ The project will install water lines and connections on the site to serve the proposed project, in conformance with City standards and the California Plumbing Code.

There are no recycled water lines that serve the project site. The nearest recycled water main lines are at the intersection of US 101 and Wolfe Road, and at Duane Avenue and Wolfe Road.

IMPACT UTIL-1: The project would not result in significant water supply impacts (Less Than Significant Impact)

Wastewater Treatment/Sanitary Sewer

Full occupancy of the proposed project is estimated to generate approximately 189,402 gallons per day of waste water (85 percent of the water demand) that would need to be treated. The proposed project would generate up to 136,387 more gallons of sewage per day than existing conditions. The net increase of sewage would be an approximately 0.009

²⁹ The number of guests at the hotel is based on the following calculation: (# of rooms)(2 beds/room)(1.5 guests/bed). BKF Engineers. <u>Domestic and Waste Water Flow Analysis</u>. 26 April 2005. The number of residences at the residential development is based on the following assumptions: 1.5 persons per 1 bedroom unit, 2.2 persons per 2 bedroom unit, and 3.4 persons per 3 bedroom unit. Environmental Planning Consultants. <u>Waste Management Planning for the Crescent, Sunnyvale</u>. 7 September 2005.

³⁰ City of Sunnyvale. <u>Water Resources Sub-Element</u>. 1996.

percent increase in the amount of sewage treated at the WPCP. The increase amount of sewage from the proposed project would not significantly impact the current influent flow to the WPCP.

As mentioned previously, the site is served by a 12-inch sewer main that has a capacity of 891,917 gpd. The proposed project would generate approximately 189,401 gpd, which is a net increase of 136,386 gpd of sewage from the site (assuming full occupancy of the existing hotel). The exact sewage flow under existing conditions is unknown at this time. Since the proposed project would increase the amount of sewage generated from the site and the exact amount of remaining capacity is unknown, the project may exceed the existing sewer main capacity.

<u>IMPACT UTIL-2</u>: The sewage generated by the proposed project would not exceed the treatment capacity at the WPCP. The proposed project will increase sewage flow from the site and may exceed the capacity of the existing sewer main. (Significant Impact)

Storm Drainage Systems

As discussed in *Section 2.9 Hydrology and Water Quality*, the proposed specific development project would result in a 20 percent decrease in impervious surfaces on the site, therefore, the proposed project would decrease the amount of runoff compared to existing conditions. The predicted storm water runoff from the proposed project is 9.80 cfs for a 10-year storm and 13.61 cfs for a 100-year storm.³¹ For these reasons, the proposed project would not exceed the capacity of the City's existing storm drainage system. The proposed project will be required to install storm drain lines and facilities on the site for collecting and managing storm water runoff, in conformance with City policies.

<u>IMPACT UTIL-3</u>: Because the proposed project would generate less runoff than under existing conditions, the proposed project would not impact the storm drainage system. (Less Than Significant Impact)

Solid Waste

The demolition and construction of the existing hotel would generate large quantities of waste, which would contribute to the total amount of waste generated by the City and may negatively affect the City's waste diversion level as required by AB 939 and the Solid Waste Goal 3.2B.

The proposed project is estimated to generate a net increase of up to 7.3 tons, or 77 cubic yards per week, of solid waste per week at completion.³² Based on waste allocation and delivery data for the City of Sunnyvale for 2004, the waste generated by the proposed project

³¹ BKF Engineers. <u>Storm Water Flow Calculations</u>. 10 February 2005.

³² The estimated project waste generation was based on the following assumptions: Residential Development— 1) development of up to 251 units, 2) an average of 2.4 people per unit, and 3) waste generation rate of 24.5 lbs per person per week; Hotel Development—1) development of a hotel with up to 263 rooms and 2) waste generation rate of 2 lbs per room per day; Commercial/Retail Development—1) waste generation rate of 0.046 lbs per square foot per day; 1 cubic yard is equivalent to 200 lbs. Sources: 1) California Integrated Waste Management Board. Estimated Solid Waste Generation Rates for Service Establishments. 5 January 2004. 5 February 2004. http://www.ciwmb.ca.gov/wastechar/WasteGenRates/WGServic.htm. 2) Environmental Planning Consultants. Waste Management Planning for The Crecent, Sunnyvale. 7 September 2004.

at completion would not exceed the City's allocation waste tonnage. It is therefore anticipated that the solid waste collection, recycling, transfer, and disposal system has sufficient capacity to serve the proposed project after completion.

<u>IMPACT UTIL-4:</u> The demolition of the existing hotel and the construction of the proposed project would generate large amounts of waste in the short-term. Operation of the proposed project would generate a net increase of solid waste from the site. There is, however, sufficient capacity at Kirby Canyon Landfill to serve the proposed project. (Less Than Significant Impact)

IMPACT UTIL-5:

2.11.3 General Plan Policies and Actions

Water Service

Community Design Action Statement 2.5C.3f states that the City should require adequate, attractive, water-wise, drought tolerant and efficiently irrigated landscaping and routinely review landscape standards.

Solid Waste

Solid Waste Action Statement 3.2B.1b states that the City should encourage and facilitate private source reduction programs, services, and facilities.

Solid Waste Policy 3.2B.2 states that the City should maximize diversion of solid waste from disposal by use of demand management techniques, providing and promoting recycling programs, and encouraging private sector recycling.

Solid Waste Action Statement 3.2B.4a states that the City should identify and support proposed laws and administrative actions that would increase the demand for and value of recycled materials in a cost effective manner.

2.11.4 Mitigation and Avoidance Measures

The project proposes the following measures:

Solid Waste

<u>MITIGATION MEASURE UTIL-1</u>: The project shall implement the City approved Waste Management Plan to be prepared for the project, which will include recommendations regarding facility design for on-going waste and recycling management systems.

The Waste Management Plan shall also include recommendations for recycling demolition wastes and reusing or recycling unused construction materials. The Plan shall describe the projected quantities of waste generated during demolition and construction, how much of those materials will be reused, recycled, or otherwise diverted from landfills, and where unrecycled materials will be disposed. Upon completion, the project shall provide the City with a report summarizing the waste type, quantity, disposition (e.g., recycled or landfilled) and facility used, to document execution of the plan.

<u>MITIGATION MEASURE UTIL-2</u>: The project shall include waste and recycling receptacles on the podium and around the project site. The proposed hotel and Condo Association shall hire staff to keep the site clean.

Sanitary Sewer

MITIGATION MEASURE UTIL-3: The project shall test the capacity of the existing sewer facilities that serve the project site prior to issuance of the site development permit. If it is determined that the proposed project would exceed the capacity of the existing sewer lines at or downstream of the site, the project shall upgrade the sewer lines and connections to provide capacity to serve the project and to meet the City's standard of operating at 75 percent or less of sewer line capacity.³³

2.11.5 Conclusion

The project, with the implementation of the above measures, would not result in significant utilities and services impacts. (Less Than Significant Impact with Mitigation)

³³ Wastewater Management Sub-Element Action Statement 3.3A.1b.

2.12 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126(c) and Appendix F (Energy Conservation of the Guidelines), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

2.12.1 Introduction

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

Energy usage is typically quantified using the British Thermal Unit (BTU). As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWhr) of electricity are 123,000 BTUs, 1,000 BTUs, and 3,400 BTUs, respectively.

Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets forth energy standards for buildings and rebates/tax credits for installation of renewable energy systems, and the Flex Your Power program promotes conservation in multiple ways. At the local level, the City's General Plan includes goals and policies whose objectives include reduction in energy usage. The project's consistency with theses goals and policies are discussed in *Section 1.6 Consistency with Plans and Policies*.

2.12.2 Existing Setting

Total energy usage in California was 8,519 trillion BTUs in the year 2000, which equates to an average of 252 million BTUs per capita. Of California's total energy usage in 2000, the breakdown by sector was 15 percent residential, 14 percent commercial, 35 percent industrial, and 36 percent transportation. This energy was primarily supplied in the form of coal (2.9 million tons), natural gas (2.3 trillion cubic feet), petroleum (647 million barrels), nuclear electric power (35.2 trillion kWhr), and hydroelectric power (42.8 trillion kWhr).

Given the nature of the proposed project (i.e., a land use decision in Sunnyvale), the remainder of this discussion will focus on the three most relevant sources of energy: electricity for residential and commercial uses, natural gas for residential and commercial uses, and gasoline for vehicle trips associated with residential and commercial uses.

Electricity

In 2003, California used over 276,000 gigawatt hours of electricity. This electricity was produced from power plants fueled by natural gas (37 percent), coal (21 percent), hydro (16 percent), nuclear (15 percent), and renewables (11 percent). Approximately 78 percent of the electricity was generated within California, with the balance imported from other states, Canada, and Mexico.

Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. The average annual usage of electricity is roughly 6,500 kWH/dwelling unit/year for residences and 13 kWhr/square foot/year for all commercial buildings.

Electricity supply in California involves a complex grid of power plants and transmission lines located in the Western United States, Canada, and Mexico. The issue is complicated by market forces that have become prominent since 1998, which is when a new regulatory environment commonly referred to as "deregulation" took effect in California. Supply is further complicated by the fact that the peak demand for electricity is significantly higher than the off-peak demand. For example, in August 2004, peak electric demand - due in large part to hot weather - reached a record high of 44,497 megawatts, which is almost double the lowest demand period.

In 2000-2001, electric demand exceeded supply on various occasions, which required utilities to institute systematic rotating outages to maintain the stability of the grid and to prevent widespread blackouts. Since that time, additional generating capacity has come on-line and upgrades to various transmission lines are occurring.

According to the California Energy Commission's 2003 Integrated Energy Policy Report, the current outlook is that California will have an adequate supply of electricity through 2009. However, the report notes that peak demand reserve shortages could return by 2006 and possibly earlier.

Natural Gas

In 2001, California used almost 2.4 trillion cubic feet of natural gas. The natural gas was used to produce electricity (41 percent), in industrial uses (28 percent), in commercial uses (10 percent), and in residential uses (21 percent). Approximately 16 percent of the natural gas was produced within California, with the balance imported from other states and Canada.

Natural gas usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all gasconsuming devices within a building. The average annual usage of natural gas is roughly 45,000 cubic feet/dwelling unit/year for residences and roughly 37 cubic feet/square foot for all commercial buildings.

According to the California Energy Commission's 2003 Integrated Energy Policy Report, the current outlook is that Northern California will have an adequate supply of natural gas through 2007. However, the report notes meeting peak demand under extreme weather conditions may require gas infrastructure improvements (e.g., additional pipeline capacity) earlier than currently programmed.

Gasoline for Motor Vehicles

Californians presently consume roughly 49.5 million gallons of gasoline and diesel each day. This is a 53 percent increase over the amount that was used 20 years ago. The primary factors contributing to this increase are 1) population growth, 2) declining per-mile cost of gasoline, 3) land use patterns that have increased the distance between jobs and housing, and 4) a shift in consumer preferences to larger, less fuel efficient motor vehicles.

The average fuel economy for the fleet of light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from about 12.6 miles-per-gallon (mpg) in the mid-1970s to the current 20.7 mpg. However, no further improvements in the average fuel economy for the overall fleet are projected through the year 2020. This conclusion is based on the fact that projected increases in the number of fuel efficient cars (e.g., hybrids) will be offset by projected increases in the number of SUVs, pickups, and vans.

Although no new refineries have been constructed in California since 1969, supply has kept pace with demand though a combination of refinery upgrades/modernizations and out-of-state imports.

According to the California Energy Commission's 2003 Integrated Energy Policy Report, the demand for gasoline and diesel for on-road vehicles is projected to increase by 36 percent over the next 20 years. Imports of foreign crude oil will increase as in-state and Alaskan supplies diminish. Since California refineries are already operating close to their full capacity, daily imports of refined gasoline and diesel are expected to double over the next 20 years. Unless out-of-state facilities expand, the gasoline and diesel markets will become increasingly volatile, with the likelihood of shortages and more prolonged periods of high prices.

2.12.3 Energy Impacts

Thresholds of Significance for Energy Impacts

For the purposes of this project, an energy impact is considered significant if the project would:

- Use fuel or energy in a wasteful manner;
- Result in a substantial increase in demand upon energy resources in relation to projected supplies; or
- Result in longer overall distances between jobs and housing.

General Plan Amendment and Specific Development Project Impacts

The proposed project would require demolition of the existing hotel and would result in the development of a new hotel, with up to 263 rooms, and up to 251 residential units. Energy will be consumed during both the construction and operational phases of these uses. The demolition and construction phase will require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition of the existing hotel and grading), and the actual construction of the buildings. The operational phase will consume energy for multiple purposes including, but not limited to, building heating and cooling,

lighting, appliances, electronics, office equipment, and commercial machinery. Operational energy will also be consumed during each vehicle trip associated with these proposed uses. Rough estimates of operational energy usage by the proposed project are provided in Table 8 below.

Table 8 Estimated Average Annual Energy Usage					
Land Use	Usage/Unit	Units	Additional Annual Energy		
	Exist	ting Land Use			
Hotel					
Electricity	13 kWhr/ft ² /year	\approx 233,188 ft ²	3.0 million kWhr/year		
Natural Gas	$37 \text{ ft}^3/\text{ft}^2/\text{year}$	≈233,188 ft ²	8.6 million ft ³ /year		
Proposed Land Uses					
Residential					
Electricity	6,500 kWhr/du/yr	Up to 251 du	1.6 million kWhr/year		
Natural Gas	$45,000/\text{ft}^3/\text{du/year}$	Up to 251 du	11.3 million ft ³ /year		
Hotel	· · ·		· · · ·		
Electricity	13 kWhr/ft ² /year	≈149,865 ft ²	2.0 million kWhr/year		
Natural Gas	$37 \text{ ft}^3/\text{ft}^2/\text{year}$	≈149,865 ft ²	5.5 million ft ³ /year		
Commercial	_				
Electricity	13 kWhr/ft ² /year	Up to 3,000 ft ²	39,000 kWhr/year		
Natural Gas	$37 \text{ ft}^3/\text{ft}^2/\text{year}$	Up to 3,000 ft ²	111,000 ft ³ /year		
Transportation					
Gasoline	0.048 gallons/mile	510 Net New Daily trips	26,806 gallons/year		
Total Net Increase in Energy Usage		Electricity	639,000 kWhr/year		
		Natural Gas	8.3 million ft ³ /year		
		Gasoline	26,806 gallons/year		

 $du = dwelling unit(s), ft^2 = square feet, ft^3 = cubic feet, kWhr=kilowatt hour, Average vehicle trip length= 3 miles$

The energy usage shown in Table 8 is a small percentage of the energy consumed in Sunnyvale as a whole. As described previously, an existing 378-room hotel currently operates on the site. As shown in Table 8 above, the existing hotel uses roughly 3.0 million kWhr/year of electricity and 8.6 million ft³/year of natural gas. Although the project would result in the use of approximately 26,806 gallons of gasoline a year, the project proposes to place housing near jobs, which would reduce the number of vehicle miles traveled and the amount of gasoline used.

The redevelopment of the site would result in intensification of the uses and would incrementally increase energy use by roughly 639,000 kWhr/year of electricity, 8.3 million ft^3 /year of natural gas, and 26,806 gallons/year of gasoline.

<u>IMPACT ENER-1</u>: While the project would result in increased energy usage on the site, this increase would not be substantial when compared to overall energy used in the City of Sunnyvale. Given the developed nature of the site, its infill location, and the

density of the proposed development, the project would not use fuel or energy in a wasteful manner, and the project would not result in significant energy impacts. (Less Than Significant Impact)

2.12.4 General Plan Policies and Actions

Energy Policy 3.5D.1 states that the City should encourage a built environment which uses the properties of nature for building heating and cooling.

Energy Policy 3.5D.2 states that the City should foster a built environment which uses mechanical, physical, and natural energy conservation measures.

Energy Action Statement 3.5D.2a states that the City should consider solar assisted domestic hot water systems in new construction.

Energy Action Statement 3.5D.2c states that the City should condition the approval of parking lots and other area lighting to require energy efficient light sources.

Energy Action Statement 3.5D.2d states that the City should encourage the commercial and industrial sector to consider energy conservation in design and construction of their facilities.

Energy Action Statement 3.5F.2a states that the City should promote water conservation program which include: the use of indoor water saving devices; reduced use of appliances that tend to increase water use; reduce use of appliances that tend to increase water use; water saving outdoor watering devices; and landscaping with low water requirements.

State Law

All new buildings shall be constructed to meet the requirements of Title 24 of the California Administrative Code, as it pertains to energy efficiency.

2.12.5 Programmed Mitigation Measures

<u>MITIGATION MEASURE ENER-1</u>: Encourage high-density communities.

<u>MITIGATION MEASURE ENER-2</u>: Reduce dependence on the automobile; encourage public transit and pedestrian and bicycle paths,

<u>MITIGATION MEASURE ENER-3</u>: Plan development that is in harmony with bioregional, historic, and cultural contexts.

<u>MITIGATION MEASURE ENER-4</u>: Evaluate and work with natural resources on the site.

<u>MITIGATION MEASURE ENER-5</u>: Protect and enhance the site by preserving and restoring local ecosystems and biodiversity.

<u>MITIGATION MEASURE ENER-6</u>: Manage storm water to maximize groundwater recharge.

<u>MITIGATION MEASURE ENER-7</u>: Develop appropriate planting strategy based on soil and climate conditions.

<u>MITIGATION MEASURE ENER-8</u>: Use water efficient plumbing fixtures and water saving appliances.

<u>MITIGATION MEASURE ENER-9</u>: Explore passive alternatives for heating and cooling, including thermal mass and natural ventilation.

<u>MITIGATION MEASURE ENER-10</u>: Design parking structures, especially those serving the residential uses, to provide for recharging electric energy vehicles and develop incentives to reward residents who use alternative energy, hybrid, and compact sized cars.

<u>MITIGATION MEASURE ENER-11</u>: Follow optimal building orientation for heat loss and gain as a primary site design consideration.

<u>MITIGATION MEASURE ENER-12</u>: Consider color and reflectivity in selection of exterior finishes.

<u>MITIGATION MEASURE ENER-13</u>: Coordinate massing of architectural elements, building skin and glazing to reduce overall heating and cooling loads.

<u>MITIGATION MEASURE ENER-14</u>: Maximize day-lighting in conjunction with solar gain and loss objectives.

<u>MITIGATION MEASURE ENER-15</u>: Use energy efficient electric lighting.

<u>MITIGATION MEASURE ENER-17</u>: Reuse demolition and construction waste to the extent feasible.

<u>MITIGATION MEASURE ENER-18</u>: Specify environmentally responsible materials and finishes, considering impact of production process, life cycle, and future maintenance and cleaning requirements.

<u>MITIGATION MEASURE ENER-19</u>: Provide dedicated recycling facilities and promote the recycling of solid waste materials.

<u>MITIGATION MEASURE ENER-20</u>: Maximize water saving measures.

<u>MITIGATION MEASURE ENER-21</u>: Use electric carts for inter-hotel transportation.

<u>MITIGATION MEASURE ENER-22</u>: Operate airport shuttle service using Compressed Natural Gas (CNG) vehicles.

<u>MITIGATION MEASURE ENER-23</u>: Provide heating, ventilation, and air conditioning (HVAC) energy management system for public space and meeting rooms.

<u>MITIGATION MEASURE ENER-24</u>: Maximize the recycling and reuse of existing materials derived form demolition.

2.12.6 Mitigation and Avoidance Measures

The project proposes the following measures to reduce the project's energy consumption:

<u>MITIGATION MEASURE ENER-25</u>: The project shall have a waste management plan for reuse and recycling of construction and demolition materials in place and operating at the beginning of project construction.³⁴

<u>MITIGATION MEASURE ENER-26</u>: All residences shall be constructed to meet the requirements of the *EnergyStar* program for new homes.

<u>MITIGATION MEASURE ENER-27</u>: Although there is not a formal *EnergyStar* program for commercial buildings, the commercial buildings shall be constructed to meet the same standards as those that apply to the residential program to the extent feasible.

<u>MITIGATION MEASURE ENER-28</u>: The idling of construction vehicles shall be avoided to reduce fuel consumption, emissions, and noise.

<u>MITIGATION MEASURE ENER-29</u>: Commercial buildings, to the extent feasible, shall:

- Install motion detectors or dimmers to control lighting;
- Install efficient security and parking lot lighting (e.g., high pressure sodium fixtures);
- Install reflective window film or awnings on all south and west facing windows;
- Install ceiling and wall insulation; and
- Install Energy Management System to control HVAC system—its operating hours, set points, scheduling of chillers, etc.

The project shall consider the following measures to reduce the project's energy consumption:

MITIGATION MEASURE ENER-30: The project should use recycled materials to reduce the use of raw materials and divert material from landfills. Construction material used should be at least 5-10 percent salvaged or refurbished materials, specifically, a minimum of 25-50 percent of building materials should contain at least 20 percent post consumer recycled content material, or a minimum of 40 percent post industrial recycled content material.³⁵

MITIGATION MEASURE ENER-31: The project should use local materials and resources in order to reduce the energy used in transporting these materials over long distances. Of the building materials used, 20-50 percent shall be manufactured within 500 miles of the building site.³⁶

<u>MITIGATION MEASURE ENER-32</u>: The project should use rapidly renewable materials in order to reduce the depletion of virgin materials and reduce use of petroleum-based

³⁴ United States Department of Energy, Energy Efficiency and Renewable Energy. <u>Energy and Environmental</u> <u>Guidelines for Construction</u>. 8 July 2004. United States Department of Energy. 9 September 2004. <u>http://www.eere.energy.gov/buildings/info/design/construction.html#construction</u>.

 ³⁵ United States Department of Energy, Energy Efficiency and Renewable Energy. <u>Energy and Environmental Guidelines for Construction</u>.
 8 July 2004. United States Department of Energy. 9 September 2004. <u>http://www.eere.energy.gov/buildings/info/design/construction.html#construction</u>.
 ³⁶ Ibid.

materials. Specifically five percent of total building materials should be made from rapidly renewable building materials.³⁷

MITIGATION MEASURE ENER-33: For components of the project where buildings would be made from wood, such as flooring and framing, the project should use a minimum of 50 percent wood-based materials certified in accordance with the Forest Stewardship Council Guidelines (<u>http://www.fscoaz.org/index.html</u>).³⁸

<u>MITIGATION MEASURE ENER-34</u>: The project should select materials with volatile organic compound limits.³⁹

<u>**MITIGATION MEASURE ENER-35**</u>: All new buildings should include a photovoltaic (i.e., solar electric) system on rooftops.⁴⁰

2.12.7 Conclusion

The project would not result in significant energy impacts. Implementation of the above measures will further reduce energy impacts of project construction and operation. (Less Than Significant Impact)

³⁷ Ibid.

³⁸ Ibid.

³⁹ United States Department of Energy, Energy Efficiency and Renewable Energy. <u>Energy and Environmental</u> <u>Guidelines for Construction</u>. 8 July 2004. United States Department of Energy. 9 September 2004. <u>http://www.eere.energy.gov/buildings/info/design/construction.html#construction</u>.

 $^{^{40}}$ An average-sized residential system (2.5 kW) in California produces in excess of 4,000 kWhr annually, which equates to 62% of the average electricity demand per residential unit. Commercial systems are generally larger than residential systems and produce commensurately more electricity. [Generally, each square foot of photovoltaic cells produces 10 watts of power in bright sunlight.]

3. **AVAILABILITY OF PUBLIC SERVICES**

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, new development will create an incremental increase in the demand for these services. The amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing.)

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). These impacts are economic; not environmental.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

3.1 **Public Safety**

The City's Department of Public Safety (DPS) provides police and fire services. There are over 200 officers in DPS that provide police and fire protection services to the City. All of the officers train and work in both police and fire.

The City of Sunnyvale participates in a mutual aid program with neighboring cities, including Mountain View, Santa Clara, and San José. Through this program, should Sunnyvale need additional assistance, one or more of the mutual aid cities would provide assistance in whatever capacity was needed. The City of Sunnyvale has a total of six fire stations. Their apparatus includes two fire trucks and six fire engines. The fire response time goal in emergency events is seven minutes and 20 seconds.⁴¹ Fire Station No. 2 would be the first to respond to the project site. It is predicted that their response time to the site would be within four to five minutes, which is within the response time goal.⁴²

The City is divided into six different beats. The project site is located within Beat 2. The most frequent crimes in the City in 2004 include auto burglary, auto theft, and other larcenv.⁴³ The police response time goal in emergency events is four minutes and 30 seconds.44

 ⁴¹ Stivers, Mark. <u>City of Sunnyvale Department of Public Safety</u>. Personal Communications. 1 March 2005.
 ⁴² Friz, Mark. <u>City of Sunnyvale Department of Public Safety</u>. Personal Communications. 24 February 2005.

⁴³ Crime Analysis Unit, Sunnyvale Department of Public Safety. <u>Sunnyvale Crimes (2003-2004)</u>. Table. 2

February 2005.

⁴⁴ Stivers, Mark. City of Sunnyvale Department of Public Safety. Personal Communications. 1 March 2005.

3.2 <u>Schools</u>

The project site is located within the Sunnyvale School District and the Fremont Union High School District. The students generated from this proposed project would likely attend San Miguel Elementary School, located at 777 San Miguel Avenue (approximately 1.4 miles east of the project site), Columbia Middle School, located at 739 Morse Avenue (approximately 2.8 miles northwest of the project site), and Fremont High School, located at 1279 Sunnyvale-Saratoga Road (approximately 4.9 miles southwest of the project site).

Based on Sunnyvale School District's student generation rate of 0.08 students per unit, the proposed project would generate approximately 20 students.⁴⁵ According to the Sunnyvale School District, San Miguel Elementary School and Columbia Middle School will be able to accommodate students generated by the proposed project.⁴⁶ Based on Fremont Union High School District's student generate approximately eight high school students.⁴⁷ According to the Fremont Union High School District, Fremont High School District, Fremont Union High School students.⁴⁷ According to the Fremont Union High School District, Fremont High School will be able to accommodate students generated by the proposed project.⁴⁸

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities as the payment of a school impact fee prior to the issuance of a building permit. The project applicant would pay Sunnyvale School District's school impact fee of \$1.27 per square foot and Fremont High School District's school districts are responsible for implementing the specific methods for mitigating school impacts under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would partially offset the costs of serving the project-related increase in student enrollment.

Implementation of the proposed General Plan Amendment would incrementally increase the number of school children in the project area. This would result in increases in school children attending the public schools identified above. State law requires that impacts to schools are mitigated through payment of fees. Development associated with the proposed land use designation would not result in the need to construct a new school.

Development associated with the proposed Specific Plan would comply with the school impact requirements of the City of Sunnyvale. Development is not anticipated to result in significant physical impacts on local schools.

⁴⁵ Mizell, Carmen Diaz. "Re: Lakeside Specific Plan." E-mail to David J. Powers and Associates from Sunnyvale School District, Manager of Student Information and Technology. 25 May 2005.

 ⁴⁶ Mizell, Carmen Diaz. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Sunnyvale School District, Manager of Student Information and Technology. 16 February 2005.
 ⁴⁷ Marsalli, Nancy. "Re: Student Generation Information." E-mail to David J. Powers and Associates from

⁴⁷ Marsalli, Nancy. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Fremont Union High School District. 2 March 2005.

⁴⁸ Coppel, Pam. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Fremont Union High School District. 28 February 2005.

Spain, Shelby. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Fremont Union High School District. 2 March 2005.

⁴⁹ Coppel, Pam. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Fremont High School District. 28 February 2005.

Chu, Gigi. "Re: Student Generation Information." E-mail to David J. Powers and Associates from Sunnyvale School District. 7 March 2005.

3.3 Parks and Recreation

The City of Sunnyvale provides parklands, open space, and community facilities for public recreation and community services. The City has a total of 838.47 acres of open space, 694.97 acres of which is City maintained and available for public use. The remaining 143.50 acres are either sites that are neither maintained nor programmed by the City's Parks and Recreation Department, or are facilities that are privately operated and not open to the public for general use. A summary of City open space is provided in Table 9. The nearest park to the project site is Fairwood Park, a 1.93 acre park located 0.4 miles north of US 101. The only other public park in the West Murphy Neighborhood Planning Area is Fair Oaks Park, a 15.28 acre park located five miles west of the project site.

The 1986 Open-Space Sub-Element of the General Plan notes the National Recreation and Park Association (NRPA) standards and guidelines, which recommend a park system, at a minimum, be composed of 6.25 to 10.5 acres of developed open space per 1,000 population. The City is currently updating the Open Space Sub-Element to exclude properties that are not within the jurisdiction of the City to program or maintain, such as Twin Creeks Sports Complex, a 50-acre site that is privately operated, and school properties, which the City does not maintain nor have any jurisdiction over. Using these standards of open space, there are 5.3 acres of open space per 1,000 people in Sunnyvale, which is short of the range advocated by NRPA.

The proposed project is estimated to increase population by 533 people. Including the future residents of the proposed project, the City would still fall short of the suggested NRPA range for recreational open space and the project would incrementally increase demand for parks in the area; however, the project includes private recreation and open space area. The proposed 1.63-acre landscape recreational area would consist of a pool, patio, and grass areas. The project will also be required to pay the City Park In-Lieu Fees of \$5,390.55 per residential housing unit.⁵⁰ This fee is paid at the time of building permit issuance.

While the additional 1.63 acres will assist in mitigating the increased demand for recreational open space, the overall requirement to maintain a minimum of 6.25 acres of open space per 1000 population will become difficult to reach as more commercial/ industrial areas convert to residential. The City has no plans in the immediate future to increase open space in this Neighborhood Planning Area.

3.4 <u>Library Services</u>

The City of Sunnyvale is served by the Sunnyvale Public Library. The Sunnyvale Public Library is located at 665 West Olive Avenue, approximately five miles northeast of the project site. The library provides resources, such as books and digital video discs (dvds), for patrons to borrow, and classes, programs, and services for adults, teens, and children. A bookmobile provides extension services for the community.

The project would incrementally increase demand for library services. However, given the size of the project, it is not anticipated to require the construction of new libraries.

⁵⁰ The park in-lieu fee is subject to change.

	Table 9				
City Open Space Inventory					
City Owned			Total Acres		
Neighborhood Parks	Braly Park	Murphy Park			
C	Cannery Park	Orchard Gardens Park			
	DeAnza Park	Ortega Park			
	Encinal Park	Panama Park			
	Fair Oaks Park	Ponderosa Park			
	Fairwood Park	Raynor Park			
	Greenwood Manor	San Antonio Pa	rk		
	Lakewood Park	Serra Park			
	Las Palmas Park	Victory Village	Park		
		Washington Par			
			Total 158.25		
Trails	JWC Greenbelt				
			Total 12.25		
Special Use	Plaza del Sol		Orchard Heritage Park		
Parks/Facilities	Community Center		Sunken Gardens Golf Course		
	Civic Center Campus	Sunnyvale Mun	icipal Golf		
		Course			
		Three Points Corner			
			Total 223.84		
City Maintained			I		
Regional Parks	Baylands Park (72 acres are developed)				
			Total 177.00		
City Maintained	Braly School	Lakewood School			
School Athletic/	Bishop School		Nimitz School		
Play Fields	Cherry Chase School	Ponderosa School			
	Cumberland School	San Miguel Sch	lool		
	Cupertino Jr. High	Serra School			
	DeAnza School	Stocklmeier Sch			
	Ellis School	Sunnyvale Mide	dle School		
	Fairwood School	Vargas School			
	Hollenbeck School	West Valley School			
0			Total 117.82		
	OTHER NON-CITY SITES (not included in City's Open Space Inventory)				
Athletic/Play Fields	Fremont High School	Sunnyvale High			
	Patrick Henry	Twin Creeks Sp	1		
	Peterson Middle School	(privately operated)			
Total 135.5					

4. GROWTH-INDUCING IMPACTS

This EIR evaluates an amendment to the City of Sunnyvale's adopted General Plan Map. The CEQA Guidelines require that an EIR identify the likelihood that a proposed project could "foster" or stimulate "...economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" [§15126.2(d)]. This section of the EIR is intended to evaluate the impacts of such growth in the surrounding environment.

The redesignation of any property in a General Plan, by definition, allows for some form of new development. Development of the project site in conformance with the proposed land use designation will be "growth." The proposed land use designation would allow for residential development on a site that currently is not designated for residential development. This growth on the site, however, would not be "induced" by the proposed project - it <u>is</u> the proposed project.

There is an existing shortage of available housing in Santa Clara County, particularly affordable ownership housing. This shortage is reflected in high rental vacancy rates, rising housing prices, and the congestion associated with commuting from outside the County. The redesignation of the project site from *Industrial* to *Specific Plan* will permit the construction of more residential units than is currently allowed in Sunnyvale. To the extent that these units are occupied by people who move to Santa Clara County from outside the County, this is new growth. To the extent that these units are occupied by people who are sharing dwelling units or who are commuting to Santa Clara County from elsewhere, they may not be considered economic or population growth as described in Section 15126.2(d) of the CEQA Guidelines.

Changing the land use designation on the project site to allow for residential uses could create pressure on nearby commercial and office uses, particularly those to the east and south of the site, to convert to residential land uses. However, the proposed General Plan land use designation change will not allow new development where development is not already allowed and will not substantially increase the need for urban infrastructure. The project itself explicitly allows more dwelling units within Sunnyvale than are planned for the existing General Plan, but these additional units are the direct result and goal of the proposed project, not induced or indirect growth.

As discussed above, changing the land use designation on the project site from *Industrial* to *Specific Plan*: (1) will not induce growth in an area where urbanization is not already planned, (2) will not create a precedent for growth outside the existing urban envelope, and (3) will not create a significant demand for new infrastructure in an area where urban infrastructure does not already exist.

<u>IMPACT GROWTH-1</u>: Based on the above discussion, the proposed project would not result in significant growth-inducing impacts. (Less Than Significant Impact)

5. CUMULATIVE IMPACTS

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. The CEQA Guidelines state (§15130) that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the potential impacts which might result from approval of past, present and reasonable foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

The Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present and probable future projects or a summary of projections from an adopted general plan or similar document. This EIR addresses both a General Plan amendment and a specific development project. The cumulative impacts discussion builds on the analysis and projections in the previously adopted Sunnyvale General Plan because this would provide the overall long term cumulative impacts of the project.

The discussion below address two aspects of cumulative impacts: 1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question? And, if that cumulative impact is likely to be significant, 2) would the contributions to that impact from the project which is the subject of this EIR, implementation of the proposed Lakeside Specific Plan project, make a cumulatively considerable contribution to those cumulative impacts?

Given that the project proposes both a General Plan amendment and a specific development, projects which can be addressed at the same level of specificity as the project and which could contribute to cumulative impacts would include other pending General Plan amendments and other development projects. The following table identifies all the pending, approved, and recently completed projects, including currently pending General Plan amendments which, in combination with the proposed GPA, were evaluated in this cumulative analysis (refer to Table 10). The locations of the cumulative projects are shown on Figure 18.

Cumulative Impacts

A total of 45 projects, including the proposed project, were identified and evaluated for cumulative impacts. The City's purpose in changing General Plan designations on property at a particular point in time is generally to guide future redevelopment (which may or may not be imminent), and to establish a suitable context for the development of appropriate infrastructure.

Even if all of these cumulative projects are approved, the implementation of all these projects is unlikely to occur immediately. They are, however, likely to develop or redevelop during the current General Plan horizon. All of the development is assumed to occur consistent with other relevant General Plan policies. In some cases, that means some of the development or redevelopment may be delayed in the near term, until and unless capacity is available on the local or regional roadway system, and after necessary infrastructure is complete to serve new development. Link to Figure 18 Locations of Cumulative Projects

Table 10Cumulative Project List

Given the size of Sunnyvale's Sphere of Influence and the number and diversity of these pending General Plan amendments, and their location within the existing urban envelope, the issue areas for which cumulative impacts could be significant include: land use, visual and aesthetics, transportation, noise, air quality, and biological resources. These cumulative impacts are addressed in greater detail below. Some individual General Plan amendments may have potentially significant impacts on other issues (i.e., biological resources), but the specifically proposed General Plan amendment evaluated in this EIR would not result in cumulatively considerable significant impacts on those particular resources.

5.1 <u>Cumulative Land Use Impacts</u>

Thresholds of Significance

Consistent with the thresholds used by the City in evaluating project-specific land use impacts, this analysis examines whether development of the cumulative projects on the list could result in the following types of land use impacts:

- Land use conflicts from placing incompatible land uses in proximity to each other. This can occur when industrial uses are constructed in an area of primarily residential development and vice versa, or when residential uses are constructed in proximity to freeways, railroad alignments, or airports. These land use conflicts can include:
 - long-term and short-term (construction-related) noise and dust generation;
 - hazardous materials use and/or contamination; and
 - traffic intrusion/spillover.
- \$ Loss of agricultural lands, including prime farmlands;
- \$ Population and housing growth that is inconsistent with the General Plan; and
- \$ Loss of open space.

Loss of Agricultural Lands

This EIR discusses the proposed project's impacts on farmland and concludes that approval of the project as it is proposed, "would not result in the loss of prime agricultural land." Since approval of the project as it is proposed would not result in the loss of any prime agricultural land, it would not contribute to a cumulatively significant loss of prime agricultural land.

<u>CUMULATIVE IMPACT LU-1:</u> The project would not contribute to a significant impact to prime agricultural land. (No Cumulative Impact)

Population and Housing

The cumulative effect of approving all of the pending projects listed in Table 10 would be to increase the number of dwelling units in the City by approximately 1,465 units, including the project. Most of the additional dwelling units would be developed at higher densities on infill sites near or adjacent to existing infrastructure and existing or planned transit facilities.

There is an existing shortage of available, ownership housing within the City of Sunnyvale, particularly affordable housing. This shortage is reflected in high rental vacancy rates, rising housing prices, and the congestion associated with commuting from outside the City and County. The redesignation of urban land for residential uses will permit the construction of

more residential units than is currently allowed in Sunnyvale, which would improve the City's existing jobs/housing imbalance. For these reasons, the cumulative projects would not result in significant population and housing impacts.

<u>CUMULATIVE IMPACT LU-2</u>: The project would not contribute to significant cumulative population and housing impacts. (Less Than Significant Cumulative Impact)

Loss of Open Space

All of the pending projects are for property which is already designated for urban land uses, and all are within the City's Urban Service Area. All of the sites are developed now, or have been developed in the past. The project, which is proposed on a site that has been developed with an existing hotel for many years, would not contribute to a significant cumulative loss of open space.

<u>CUMULATIVE IMPACT LU-3:</u> The project would not significantly contribute to a cumulatively considerable loss of open space. (Less Than Significant Cumulative Impact)

5.2 <u>Cumulative Visual and Aesthetic Impacts</u>

Thresholds of Significance

Consistent with the thresholds used by the City in evaluating project-specific visual and aesthetic impacts, this analysis examines whether development of the cumulative projects on the list in Table 10 could result in the following types of visual and aesthetic impacts:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As discussed above, the projects would not result in a cumulative loss of visual open space. All of the sites are developed, designated for urban land uses, and within the City's Urban Service Area. For each project, visual and aesthetic effects would be lessened by implementing various mitigation measures. Such measures include incorporating parks and open space areas into specific plan and/or site designs, using aesthetically-pleasing architectural features in building designs, and directing lighting in a way to not cause significant glare or light spillover onto adjacent properties. For these reasons, the cumulative projects will not have significant impacts on a scenic vista, damage scenic resources, degrade existing visual character of the site, or create new sources of light or glare.

<u>CUMULATIVE IMPACT VIS-1</u>: The cumulative projects would not result in a significant visual or aesthetic impact. (Less Than Significant Cumulative Impact)

5.3 <u>Cumulative Transportation Impacts</u>

Thresholds of Significance

For the purposes of this cumulative analysis, if one or more of these thresholds is exceeded, the proposed cumulative projects would have cumulatively significant adverse impacts.

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or City of Sunnyvale for designated roads or highway;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., from equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Future Growth Intersection Analysis

Traffic volumes under future growth conditions were estimated by applying an annual growth rate of 1.8 percent to the existing volumes, then adding the trips from approved developments and the proposed project trips. The growth rate factor was applied from year 2005 through year 2010. The future growth factor was calculated by comparing 2025 baseline traffic volumes to existing counts. The 2025 volumes were taken from the CCS Planning and Engineering *Comprehensive Expressway Planning Study*.

Under future growth conditions, the intersection of Lawrence Expressway and Oakmead Parkway is projected to operate at LOS D during both AM and PM peak hours (refer to Appendix D).

Depending on the circumstances of each individual project, including size and location, the cumulative analysis may conclude that one or more individually proposed projects would contribute substantially to significant cumulative impacts, or that none of the individually proposed amendments would make a more meaningful contribution to the cumulative impacts than any other.

All of the pending development projects listed in Table 10 will, to varying degrees, add additional traffic trips to the roadway network throughout the City of Sunnyvale. Since approval of the project as it is proposed would not result in significant traffic and circulation impacts, the project would not contribute to cumulatively significant traffic and circulation impacts.

<u>CUMULATIVE IMPACT TRANS-1:</u> The project would not contribute to cumulatively significant traffic and circulation impacts. (Less Than Significant Cumulative Impact)

5.4 <u>Cumulative Noise Impacts</u>

Thresholds of Significance

For the purposes of this cumulative analysis and consistent with the thresholds used by the City in evaluating cumulative noise impacts from development projects, if one or more of these thresholds is exceeded, the proposed projects would have cumulatively significant adverse impacts.

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

While CEQA does not specifically define what amount of noise level increase is considered significant, the City of Sunnyvale defines a significant noise impact from new development on existing land uses if: 1) the existing noise level on the site is normally acceptable and the proposed project would increase the existing, normally acceptable noise level by more than five dBA, but the noise level is still normally acceptable; 2) the existing noise level on the site is normally acceptable and the proposed project would increase the proposed project would increase the noise level by more than three dBA and the noise level exceeds the normally acceptable levels, or 3) the existing noise level on the site exceeds normally acceptable levels and the proposed project increases the noise level by more than three dBA.

As described at the beginning of the Cumulative Impacts Section, the cumulative project sites are located throughout the urbanized City of Sunnyvale. The existing noise environment of the area is defined by typical urban activities with transportation activities being the single greatest contributor to overall noise.

Noise levels along freeways, expressways, arterials and other streets result from a combination of traffic volumes, speed of the vehicles, and type of vehicles (*i.e.*, percentage of heavy trucks). These variables have differing effects upon sound levels; for example, sound levels may actually be lower with higher volumes of traffic if the traffic is moving slowly in heavily congested conditions. A 26 percent increase in traffic volume will increase sound levels by one decibel if the speed remains constant. An increase of three decibels or greater

is required to be perceived by the human ear; as a general rule, traffic volumes on a given roadway must double to cause a three decibel increase in noise levels, assuming speeds remain constant.

The cumulative projects being considered in Sunnyvale will result in the types of noise-related impacts described below.

Impacts from Ambient Noise Levels

At various locations, it is proposed that noise-sensitive land uses (e.g., residences) would be constructed on sites where existing noise levels exceed City General Plan Noise/Land Use Compatibility standards. Such locations are typically those adjacent to railroads, arterials, expressways, and freeways, and beneath or near aircraft flight paths.

Where noise-sensitive uses are proposed at locations with elevated ambient noise levels, such impacts are typically mitigated through the use of noise-reducing building materials (e.g., noise-rated windows, insulation, etc.) and through site design (e.g., setbacks, sound walls, placing outdoor use areas in areas that are shielded from roadway noise, etc.). The City requires that the specific building design measures be identified during the design review process. The design and inclusion of the mitigation measures for attached residential uses is also verified in conformance with state law prior to issuance of building permits. Existing laws and policies will ensure that interior noise levels meet relevant standards. For these reasons, the cumulative projects would not be subject to significant noise impacts from ambient noise levels.

<u>CUMULATIVE IMPACT NOISE-1</u>: The proposed project would not result in a significant contribution to cumulative noise impacts from ambient noise levels. (Less Than Significant Cumulative Impact)

Impacts to Nearby Uses from Cumulative Project Traffic

Traffic associated with cumulative development will increase noise along many roadways in the greater Sunnyvale area. Given the high existing traffic volumes on the roadways in the area, the noise increase resulting from dispersal of these additional trips would not be significant along roadways where existing volumes are high (e.g., freeways, expressways, and most existing arterials).

<u>CUMULATIVE IMPACT NOISE-2:</u> The proposed project would not result in a significant contribution to cumulative noise impacts from increased traffic on surrounding roadways. (Less Than Significant Cumulative Impact)

Cumulative Construction Noise

The construction of these cumulative projects would result in short-term noise and disturbance at various locations throughout the City. However, these cumulative project sites are scattered throughout the City, and their schedules for construction are different and are likely to occur over the timeframe of the next several years. In addition, construction noise mitigation measures are typically included as part of each project, especially large development and public projects. Given these factors, and the fact that all construction projects are temporary, the cumulative construction noise associated with the pending

projects is not anticipated to result in significant impacts. The proposed project includes measures to offset its construction noise impacts, and therefore, would not significantly contribute to cumulatively considerable short-term construction noise impacts.

<u>CUMULATIVE IMPACT NOISE-3:</u> The project would not significantly contribute to cumulatively considerable temporary construction noise impacts. (Less Than Significant Temporary Cumulative Impact)

5.5 <u>Cumulative Air Quality Impacts</u>

Clean Air Plan

In order to satisfy the requirements of both state and federal legislation, the Bay Area Air Quality Management District (BAAQMD) prepared a Clean Air Plan (CAP) that is based on quantified analysis. This analysis includes an estimate of the amount of air pollution that will be generated by various sources, especially vehicular traffic. The estimates of traffic are based on the General Plans for all of the jurisdictions within the BAAQMD's air shed.

The CAP also identifies what measures will be implemented to reduce the pollution to levels that are consistent with the state and federal laws during the mandatory time frames (*i.e.*, by the designated target date). The mitigations include upgraded engines and fuels, along with the planning policies required to be in cities' general plans to achieve CAP conformance.

As discussed in Section 2.5 Air Quality of this EIR, BAAQMD identifies thresholds of significance to be used in evaluating the likely air quality impacts from proposed general plan amendments. If a project is consistent with the population projections in the version of the General Plan that was used to prepare the CAP, then it can be assumed that the project will not result in long term air quality impacts that cannot be mitigated through implementation of the mitigation measures that are in the CAP and in the General Plan.

If growth in population is greater than assumed in the CAP emission inventory, then population-based emissions also are likely to be greater than assumed in the CAP and the analysis done for the CAP is not relevant. Consequently, attainment of the State air quality standards could be delayed, the project is inconsistent with air quality planning for the region, and will have a significant air quality impact.

Thresholds of Significance

Consistent with the thresholds used by BAAQMD, this analysis evaluates whether the cumulative projects are consistent with the adopted CAP or could result in a significant air quality impact.

Cumulative Air Quality Impacts

The proposed project, in conjunction with the cumulative projects, would add housing that is not accounted for in the City's General Plan or the CAP, and would therefore technically be inconsistent with the assumptions in the CAP. However, the City currently has more jobs than housing: people working in Sunnyvale commute from neighboring cities because of the shortage of housing in the City. The cumulative projects would provide Sunnyvale employees residing in other communities within the Bay Area and outlying areas with more

local housing. It can be concluded, therefore, that commute lengths and vehicle miles traveled could be incrementally reduced by the proposed project and the cumulative projects, and therefore, these projects could have a beneficial impact on air quality. In addition, given the minimal increase in net traffic trips resulting from the proposed redevelopment on the site refer to *Section 2.3 Transportation*), the project's contribution to these cumulative impacts would not be considerable. For these reasons, the cumulative air quality impacts are not considered significant.

<u>CUMULATIVE IMPACT AQ-1:</u> The project would not significantly contribute to cumulatively considerable long-term air quality impacts. (Less Than Significant Temporary Cumulative Impact)

Short-Term Cumulative Air Quality Impacts

Construction activities associated with all the pending projects would temporarily affect local air quality. Construction activities such as demolition, earthmoving, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. However, as mentioned above, these cumulative project sites are scattered throughout the City, and their schedules for construction are different and are likely to occur over the timeframe of the next several years. In addition, construction mitigation measures are typically included as part of each project, especially large development and public projects. Given these factors, and the fact that all construction projects are not anticipated to be significant. The proposed project includes measures to offset its construction impacts, and therefore, would not significantly contribute to cumulatively considerable short-term construction air quality impacts.

<u>CUMULATIVE IMPACT AQ-2</u>: The project would not significantly contribute to cumulatively considerable temporary air quality impacts. (Less Than Significant Temporary Cumulative Impact)

5.6 <u>Cumulative Biological Resources Impacts</u>

Thresholds of Significance

Consistent with the thresholds used by the City in evaluating project-specific biological impacts, a cumulative impact to biological resources is considered significant if the proposed project, in conjunction with other pending projects, would have a substantial adverse effect, either directly or through habitat modification, on any special status species or sensitive biological habitat.

Cumulative Impacts to Sensitive Plant and Animal Species

All of the cumulative project sites are currently developed and provide minimal to no habitat for special status species. As described in *Section 2.6 Biological Resources*, because the project would not result in impacts to individual special status plants or animals or their habitat, it would not contribute to a cumulatively significant impact to these species.

<u>CUMULATIVE IMPACT BIO-1</u>: The project would not contribute to cumulative impacts to special status species or their habitat. (Less Than Significant Cumulative Impact)

Cumulative Impacts to Trees

The City of Sunnyvale Tree Preservation Ordinance defines a tree of significant size as any woody plant which has a trunk of 38 inches or greater in circumference, measured at four feet above the ground. A tree removal permit is required from the City for the removal of any significant size trees. Each of the cumulative projects would be required to mitigate the removal of mature/significant-sized trees. As described above, the cumulative project sites are scattered throughout the City, and their schedules for construction (and therefore, tree removal and replacement) are different and are likely to occur over the timeframe of the next several years. For these reasons, the pending projects are not anticipated to result in a significant cumulative loss of mature trees.

<u>CUMULATIVE IMPACT BIO-2</u>: The project would be required to mitigate the loss of mature trees on the site and would not contribute to a cumulative significant loss of mature trees throughout the City. (Less Than Significant Cumulative Impact)

5.7 <u>Cumulative Utilities and Service Systems Impacts</u>

Approval and full implementation of the cumulative projects listed in Table 10, in conjunction with the buildout of the City's current General Plan, would result in the construction of new industrial, commercial, and residential development. Each of these uses would have different impacts upon the City's utility and service systems. Utility and service providers maintain long-term projections for demand for their services with the City based on the City's General Plan, and in many cases have developed strategies to meet the anticipated demand levels.

Thresholds of Significance

For the purposes of this project, a cumulative impact to utility and service system resources is considered significant if the proposed project, in conjunction with the other pending projects would exceed the current or feasible future capability of the relevant utility or service system.

Cumulative Impacts to Water, Sewer, Storm Drain, Solid Waste, and Electricity and Natural Gas Services

Implementation of the cumulative projects would result in a additional demand upon utilities and service systems. Each project would be required to conform to the goals and policies in the City's Environmental Management Sub-Element of the General Plan regarding water resources, sanitary sewer system, surface runoff, solid waste management, and energy. The projects will also be required by the City to mitigate their project impacts as part of the development review process. For these reasons, the cumulative projects, in conformance with the goals and policies in the Environmental Management Sub-Element and with the implementation of standard project specific mitigation measures, are not anticipated to result in significant cumulative impacts to utilities and services. <u>CUMULATIVE IMPACT UTIL-1</u>: The project would conform to the City's goals and policies regarding water resources, sanitary sewer system, surface runoff, solid waste management, and energy. The project would also implement the mitigation measures identified in *Section 2.11 Utilities and Service Systems* to further reduce solid waste generation and impacts to the sewer system. For these reasons, the project would not result in a significant impact to utilities or service systems or substantially contribute to a cumulative impact on utilities or service systems. (Less Than Significant Cumulative Impact)

The project would not result in any significant or unavoidable impacts. All impacts of the proposed project would be mitigated to a less than significant level with incorporation of applicable General Plan policies and actions and the project-specific mitigation measures identified in this EIR.

7. ALTERNATIVES TO THE PROJECT

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives which "would feasibility attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The purpose of this section is to determine whether there are alternatives of design, scope or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive. [§15126.6]

In order to comply with the purposes of CEQA, it is important to identify alternatives that reduce the significant impacts which are anticipated to occur if the project is implemented, but to try to meet as many of the project's objectives as possible. The Guidelines emphasize a common sense approach - the alternatives should be reasonable, should "foster informed decision making and public participation" and should focus on alternatives that avoid or substantially lessen the significant impacts.

The three critical factors to consider in selecting and evaluating alternatives are, therefore: 1) the significant impacts from the proposed project which could be reduced or avoided by an alternative, 2) the project's objectives, and 3) the feasibility of the alternatives available. Each of these factors is discussed below.

Significant Impacts of the Project

As mentioned above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. As discussed previously in this EIR, the project does not result in any significant unmitigated or unavoidable impacts.

Alternatives may also be considered if they would further reduce impacts that are already less than significant because the project is proposing mitigation. Impacts that would be significant, but for which the project includes mitigation to reduce them to less than significant levels, include impacts from traffic noise, short-term construction noise and dust impacts, possible disturbance to raptors nesting in existing trees on the site, loss of significant-size trees, impacts from the presence of hazardous materials, possible disturbance of unknown archaeological resources which could be present at the site, and potential impacts from geologic and soil conditions on the site.

CEQA encourages consideration of an alternative site when impacts of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the impacts of the project and meet most of the project objectives need be considered for inclusion in the EIR.

Objectives of the Project

While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The project proposes to demolish the existing, outdated hotel on the 8.83-acre project site and develop a new hotel and up to 251 residential units. The applicant has indicated that the objectives of the project are:

- To increase the value of their property by developing an new, high-end hotel, which includes updated amenities and accommodations for conferences, meetings, and weddings, to allow the hotel to remain competitive with existing, higher-end hotels in the area; and
- To develop a high-quality residential (condominium) development to help meet the need for housing in Sunnyvale.

Feasibility of Alternatives

CEQA, the CEQA Guidelines, and the case law on the subject have found that feasibility can be based on a wide range of factors and influences. The Guidelines advise that such factors *can* include (but are not necessarily limited to) the suitability of an alternate site, economic viability, availability of infrastructure, consistency with a general plan or with other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can "reasonably acquire, control or otherwise have access to the alternative site" ['15126.6(f)(1)].

Selection of Alternatives

In addition to "No Project," the Guidelines advise that the range of alternatives discussed in the EIR should be limited to those that "would avoid or substantially lessen any of the significant effects of the project," or in the case of the proposed project, would further reduce impacts that are considered less than significant with the incorporation of identified mitigation [§15126.6(f)]. Although the project's visual impacts would not be significant, a reduced scale alternative is evaluated below. The discussion below addresses several alternatives which could reduce these project impacts. The project's exterior noise impacts are related to the podium's exposure to vehicular noise from US 101. Therefore, a Design Alternative that would orient buildings to reduce the noise exposure level to the podium area. In addition, alternative land use alternative and alternative locations are also evaluated.

The components of these alternatives are described below, followed by a discussion of their impacts and how they would differ from those of the proposed project. A summary of the environmental impacts of the proposed project and the project alternatives is provided in Table 11 at the end of this section.

7.1 NO PROJECT ALTERNATIVE

The Guidelines specifically require consideration of a "No Project" Alternative. The purpose in including a No Project Alternative is to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The Guidelines specifically advise that No Project is "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." The Guidelines emphasize that an EIR should take a practical approach, and not "…create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment" [§15126.6(e)(3)(B)].

Since the project site is currently developed with an existing hotel, the "No Project" Alternative would likely include the continued operation of that hotel, potentially at full occupancy/capacity or potentially at a lesser capacity.⁵¹ Given the age and condition of the existing hotel, if the General Plan land use designation and zoning were to remain the same, it is likely that the current or future owners will wish to upgrade the existing hotel.

Under the current General Plan and zoning designation, the site could be redeveloped with a building or buildings totaling up to 153,854 square feet, with a maximum allowed building height of 75 feet (eight stories).

Comparison of Environmental Impacts

The No Project Alternative would avoid all the environmental impacts of the project, assuming the continued operation of the existing hotel on the site. In this scenario, the project's less than significant visual impacts, short-term construction noise and air quality impacts, and impacts to raptors and trees would also be avoided.

It should be noted that under the No Project Alternative, the site could be redeveloped with another industrial use, without amending the City's General Plan. Redevelopment of the project site under the existing General Plan designation would avoid the noise impacts to sensitive uses from traffic noise and also further reduce the less than significant visual impacts of the project. However, redevelopment of the site would likely result in short-term construction impacts similar to the proposed project.

Relationship to Project Objectives

This alternative would not meet any of the project objectives.

Conclusion

The No Project Alternative would avoid the less than significant visual, noise, air quality, and biological impacts of the project. While the No Project Alternative could avoid or substantially reduce the identified environmental impacts of the proposed project, it would not meet the main project objectives of upgrading the aging hotel and providing residential uses on an infill site within the City of Sunnyvale.

⁵¹ According to the applicant, the existing hotel has operated at roughly 55 percent of capacity for the last three years. Source: Green, Kim. "Re: Info needed for 2nd AdDraft." Email to David J. Powers and Associates from Steinberg Architects. 9 May 2005.

7.2 REDUCED SCALE ALTERNATIVE

A Reduced Scale Alternative to the project would involve development of the proposed new hotel and residential units at a lower maximum height in order to reduce the less than significant visual impacts of the project. The Specific Plan project proposes a maximum height of 80 feet. This alternative assumes a maximum building height of 68 feet, to be consistent with the adjacent Avalon apartment complex, and this alternative also assumes that the layout and size of the buildings is similar to the proposed project. The height of the proposed hotel floors under the specific project described in *Section I.*, which is proposed to implement the Specific Plan, are eight feet and six inches and the height of the proposed residential condominium floors are 10 feet. With this lower maximum height, it is assumed that two floors would be lost for the proposed hotel development and one floor would be lost for the proposed residential development.

For the proposed hotel development, assuming that there are 38 rooms per floor, the Reduced Scale Alternative would result in the loss of approximately 76 rooms.⁵² Therefore, the maximum number of hotel rooms allowed under the Specific Plan Reduced Scale Alternative would be reduced from 263 rooms to 187 rooms. For the specific development project, the number of rooms would be reduced from 253 rooms to 177 rooms under this alternative.

For the proposed residential development, assuming that there are 10 units per floor and the layout of the project is the same (i.e., four condominium buildings), the Reduced Scale Alternative would result in the loss of approximately 40 units.⁵³ Therefore, the maximum number of condominiums allowed under the Specific Plan Reduced Scale Alternative would be reduced from 251 units to 211 units. For the specific development project, the number of units would be reduced from 241 units to 201 units.

Comparison of Environmental Impacts

The Reduced Scale Alternative would reduce the height and mass/scale of the proposed buildings, and therefore, would reduce the project's less than significant visual impact. Because this alternative would result in fewer hotel rooms and residential units, this alternative would also slightly reduce the project's less than significant traffic, air quality, and utilities and services impacts.

This alternative assumes the same building orientation as the proposed project. The impacts of ambient noise levels would be similar to the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to the proposed project. In addition, the impacts to significant size trees would be similar to the proposed project. The Reduced Scale Alternative would be affected by the same existing high ambient noise levels as the proposed project.

Relationship to Project Objectives

This alternative would be less consistent than the proposed project with the project objectives. If the amount of development allowed under this alternative would not generate sufficient revenue to meet

⁵² Green, Kim. "Re: Crescent Unit Count." E-mail to David J. Powers and Associates, Inc. from Steinberg Architects. 6 June, 2005.

⁵³ Green, Kim. "Re: Crescent Unit Count." E-mail to David J. Powers and Associates, Inc. from Steinberg Architects. 6 June, 2005.

the applicant's objectives for redeveloping the site, this alternative might not be economically feasible.

Conclusion

Overall, the Reduced Development Alternative would be environmentally superior to the proposed project, because it would further reduce the project's less than significant visual impact. If fewer units were built, the project's less than significant traffic and air quality impacts would also be reduced. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project.

7.3 DESIGN ALTERNATIVE

In order to avoid or further reduce the less than significant impacts to the project from ambient noise levels at the site, a Design Alternative to the project would involve re-orientation of the residential buildings to shield the proposed outdoor recreational area from traffic noise from US 101. This alternative assumes that the same type and number of residential units could be built on the site.

Comparison of Environmental Impacts

The Design Alternative would reduce the significant impacts to the project from noise levels. Because this alternative would allow the construction of the same number of units and hotel rooms as the proposed project, and because the buildings would be oriented along the entire site frontage, this alternative would likely result in greater visual and aesthetic impacts as compared to the proposed project design.

This alternative would result in the same less than significant traffic, air quality, water quality, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would also be comparable to the proposed project.

To the extent this alternative would require the removal of additional trees along the site's Lakeside Drive frontage, the impacts to significant size trees could be greater than the proposed project.

Relationship to Project Objectives

Because this alternative would allow for the same amount of residential and hotel development on the site, this alterative would generally be consistent with the project objectives. However, the orientation of the buildings would not be consistent with the design goals for the site.

Conclusion

Overall, the Design Alternative would be environmentally superior to the proposed project, because it would further reduce the noise impacts upon the project. This alternative could result in greater visual and aesthetic impacts than the proposed project design. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project. Because this alternative would allow for the same amount of residential and hotel development on the site, this alterative would generally be consistent with the project objectives.

7.4 REDUCED HEIGHT AND DESIGN ALTERNATIVE

In order to avoid the both the visual/aesthetic impacts from the project as well as the impacts to the project from high ambient noise levels at the site, another alternative would be a combination of the prior two alternatives. This alternative would involve a lower overall building height as well as reorientation of the residential buildings to shield the proposed outdoor recreational area from traffic noise from US 101. This alternative assumes that the same reduction in the number of residential units as the Reduced Scale Alternative.

Comparison of Environmental Impacts

The Reduced Height and Design Alternative would further reduce the project's less than significant visual and noise impacts. By re-orienting the residential buildings, this alternative would further reduce the impacts to the outdoor recreation area from noise levels along US 101. In addition, under this alternative the buildings would be constructed at a lower height, to conform to the adjacent residential development, and their visual dominance would be reduced. However, although the buildings would not be as tall, because the buildings would be oriented along the entire site frontage, this alternative design could result in greater visual and aesthetic impacts as compared to the proposed project design.

This alternative would result in roughly the same less than significant traffic, air quality, water quality, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would also be comparable to the proposed project.

To the extent this alternative would require the removal of additional trees along the site's Lakeside Drive frontage, the impacts to significant size trees could be greater than the proposed project.

Relationship to Project Objectives

Because this alternative would allow for the same amount of residential and hotel development on the site, this alterative would generally be consistent with the project objectives.

Conclusion

Overall, the Reduced Height and Design Alternative would be environmentally superior to the proposed project, because it would further reduce the project's visual and noise impacts. However, depending on the exact building orientation, this alternative could actually result in a greater visual presence than the proposed project design. Most impacts resulting from redeveloping the site, including short-term noise, dust, and water quality impacts, would generally be comparable to those from the proposed project.

This alternative would be less consistent than the proposed project with the project objectives. If the amount of development allowed under this alternative would not generate sufficient revenue to meet the applicant's objectives for redeveloping the site, this alternative might not be economically feasible.

7.5 ALTERNATIVE LAND USE

Another alternative to the proposed project would be to develop the project site with an alternative land use, such as an industrial use. This alternative would allow for a mix of light industrial uses, such as research and development, product assembly, warehousing, and heavy industrial uses, such as, milling, refining, and processing of bulk raw materials on the site. However, this alternative would not allow for any residential uses or a new hotel on the site.

Comparison of Environmental Impacts

Consistent with the City's requirements for industrial sites, this alternative assumes that such industrial uses would be developed at a maximum height of up to 75 feet, plus an additional 25 feet for towers, spires, machinery penthouses not exceeding 25 percent of the roof area on which a penthouse is located, scenery lofts, cupolas, water tanks, telecommunications facilities, and similar architectural and utility structures including equipment screening (Municipal Code 19.32.030). This alternative therefore would be developed at a slightly lower scale than the proposed project and could slightly reduce the less than significant visual and aesthetic impacts of the project. In addition, because industrial uses are not as sensitive to high noise levels, developing the site with industrial uses, as opposed to residential uses, would avoid the outdoor noise impacts of the project.

Because the uses allowed under this alternative would not include residential, this alternative would also avoid the project's less than significant impacts associated with the presence of hazardous materials on the site.

This alternative would likely result in similar less than significant traffic, air quality, water quality, and utilities and services impacts to the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to the proposed project. In addition, the impacts to significant size trees would be similar to the proposed project.

Relationship to Project Objectives

This alternative would not be consistent with the project objectives of providing a high-end hotel on the site and providing residential uses within the City of Sunnyvale. It is not known whether an industrial development would be economically viable on the site. If the development allowed under this alternative would not generate sufficient revenue to meet the applicant's objectives for redeveloping the site, this alternative might not be economically feasible.

Conclusion

The Alternative Land Use would avoid the project's visual and aesthetic and noise impacts. Other impacts would be similar to the proposed project. However, because this alternative would not allow for residential uses on the site, this alternative does not meet the project objectives, which include developing a new, high-end hotel and an economically viable, high-quality residential development in Sunnyvale.

7.6 ALTERNATIVE LOCATION

The CEQA Guidelines require that an EIR identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project" [\$15126.6 (f) (2) (A)]. For the proposed project, the alternative location should further reduce less than significant impacts.

As discussed previously in this section, the overall objectives of the project are: 1) to develop an new, high-end hotel, hotel to remain competitive with existing, higher-end hotels in the area; and 2) to develop a high-quality residential (condominium) development to help meet the need for housing in Sunnyvale.

The project is proposing a new hotel with up to 263 rooms and up to 251 new residential units on the approximately 8.83-acre site. An alternative site would need to be at least of comparable size, within the existing urbanized area of Sunnyvale, and with adequate visibility, roadway access, and utility capacity to serve the development proposed. Since the proposed project site is an older industrial site, with an existing hotel, an appropriate alternative site might also be a developed property.

In order to identify an alternative site that might reasonably be considered to "feasibly accomplish most of the basic purposes" of the project, and would also further reduce less than significant impacts, it was assumed that such a site would ideally have the following characteristics:

- 1. Approximately 8-9 acres in size;
- 2. Not designated as Prime Farmland;
- 3. Located near a freeway and major roadways with good visibility;
- 4. Served by available infrastructure; and
- 5. Immediately available.

Because one of the objectives is to locate the new hotel and residential uses within the urban area of Sunnyvale, alternative locations outside the urban boundary were not identified. Similarly, alternative sites which are significantly smaller than the proposed site, and thus would not allow development of an equivalent number of hotel rooms and dwelling units at densities roughly similar to the proposed development, were also rejected.

A review of vacant and underutilized sites in Sunnyvale was conducted in order to identify potentially suitable alternative locations for the project. Potential alternative sites were evaluated in terms of whether they would: 1) reduce or avoid some or all of the environmental impacts of the proposed project; 2) be of sufficient size to meet most of the basic project objectives; and 3) be immediately available to be acquired or controlled by the applicant.

The following properties were identified and their general feasibility is discussed below. Figure 19 shows the location of the alternative location sites.

1. <u>1217 Wildwood Avenue</u>

This property is approximately 5.5 acres and currently developed with a hotel. The existing hotel is two-stories in height and has 176 guest rooms. This site is zoned for commercial uses and located adjacent to US 101 and commercial and residential uses. The property owners have approached the City with preliminary plans to raze the site and rebuild at higher densities.

Link to Figure 19 Alternative Site Locations

2. <u>1030 Duane Avenue</u>

This property is approximately 7.7 acres and currently developed with commercial uses. There are five units on the site that are one story in height. The site is zoned for industrial uses and located adjacent to US 101 and industrial and residential uses. The property owners have approached the City with preliminary plans to redevelop the site with residential uses.

3. <u>962 East Duane Avenue</u>

This property is approximately 16 acres and consists of an expansive open grass area, a concrete pathway, and mature trees along the perimeter of the site. The site is zoned for industrial uses. The site is located near US 101 and adjacent to industrial and residential uses. The property owner has requested a General Plan Amendment to develop residential uses on the site.

4. <u>560 Britton Avenue</u>

This property is the old Sunnyvale High School. The site is approximately 30.8 acres and is currently developed with five buildings, all one story in height. The site is zoned for industrial uses and is located adjacent to industrial and residential uses.

5. Additional sites, of larger size, were identified as potential alternative locations for the proposed project but these sites have constraints that would preclude them as feasible alternatives. These sites are listed below with a brief explanation of their constraints:

Moffett Park

Moffett Park consists of many large parcels. The site allows hotel uses, but residential uses are not allowed due to Moffett Park Specific Plan regulations. Therefore this site is considered infeasible and is not discussed further.

Eastern M-S (Industrial and Service) Area

This area is generally located south of Duane Avenue, east of Britton Avenue, north of Hendy Avenue, and west of Calabazas Creek (refer to Figure 20). The parcels are zoned M-S (Industrial and Service) and the development of a hotel and residential uses are allowed under this zoning. This area is either classified as contaminated or occupied by long-term business. Due to the presences of hazardous materials in this area and the unlikely acquisition of property in this area, this area is considered infeasible and is not discussed further.

Western M-S (Industrial and Service) Area

This area is generally located south of US 101, east of SR 237, north of California Avenue, and west of Mathilda Avenue (refer to Figure 20). The parcels are zoned M-S (Industrial and Service) and the development of a hotel and residential uses are allowed under this zoning. Residential uses, however, would not be allowed because this area is located within the Moffett Federal Airfield crash zone (AICUZ). For this reason, this area is considered infeasible and is not discussed further.

Link to Figure 20 Eastern and Western M-S Areas

7.6.1 Comparison of Environmental Impacts

1217 Wildwood Avenue

Development of the proposed project at this alternative location would result in greater visual impacts because this site is approximately three acres smaller than the project site and would require the project to be developed at a greater height.

This alternative location would result in the same less than significant air quality, traffic, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, and impacts to biological resources, would be comparable to those from the proposed project.

1030 Duane Avenue

This alternative location for the project would further reduce the project's less than significant noise impacts because the site is not subject to the same vehicular noise levels (generated from US 101) as the project site. This site is located along Duane Avenue, which does not have as high of traffic volumes as US 101. Development of the proposed project on this alternative site would result in a greater visual impact. The existing buildings on the site are of less stature than the buildings on the project site and redevelopment of the site with buildings of up to 80 feet would be a greater visual change in character of this alternative site than the project site.

This alternative location would result in the same less than significant air quality, traffic, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to those from the proposed project.

962 East Duane Avenue

This alternative location for the project would further reduce the project's less than significant noise impacts because this alternative site is not subject to the same vehicular noise levels (generated from US 101) as the project site. The site is located along East Duane Avenue, which does not have as high of traffic volumes as US 101. Since this alternative site is approximately 16 acres in size, development of the proposed project at this site would only require a portion of the site.

Development of the proposed project on this alternative site would result in a greater visual impact because there are no existing buildings on the site. Redeveloping approximately 16 acres of grass area with buildings of up to 80 feet would be a substantial change in the visual character of the site. The proposed project at this site would result in a substantial increase in the amount of runoff from the site. The majority of the site consists of pervious surfaces and development of the project would substantially increase the amount of impervious surfaces, therefore, increasing the amount of runoff from the site.

This alternative location would result in the same less than significant air quality and traffic impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to those from the proposed project.

560 Britton Avenue

This alternative location for the project would further reduce the project's less than significant noise impacts because the site is not subject to the same vehicular noise levels (generated from US 101) as the project site. This site is located along Britton Avenue, which does not have as high of traffic volumes as US 101. Since this alternative location is approximately 31 acres in size, development of the proposed project on this site would only require a portion of the site. Development of the proposed project on this alternative site would result in a greater visual impact because the existing buildings on the site are of less stature than the buildings on the project site, and redevelopment of the site with buildings of up to 80 feet would be a greater visual change in character of this alternative site than the project site.

This alternative location would result in the same less than significant air quality, traffic, and utilities and services impacts as the proposed project. Overall construction impacts related to clearing and grading operations, such as short-term noise, dust and water quality impacts, would be comparable to those from the proposed project.

7.6.2 Relationship to Project Objectives

All of the alternative locations are not under the control of the applicant. Since the sites are not controlled by the applicant, they would not be compatible with the applicant's objective for redeveloping their own property. These locations would, however, be consistent with the City's objective of providing residential uses within infill locations in the City.

Conclusion

All of the alternative sites would probably have a slightly greater visual impact than that of the proposed project. Development of the proposed project at the Wildwood site would probably result in similar noise impacts to the project because this alternative site is also subject to traffic noise from US 101 as the project site. The development of the project at the other alternative sites would probably have lesser noise impacts than the project site.

In addition, the overall construction impacts related to clearing and grading operations, such as shortterm noise, dust and water quality impacts, would be comparable to those from the proposed project. The alternative locations could potentially avoid the less than significant impacts due to the presence of hazardous materials.

Because the alternative locations would involve property not currently under control by the applicant, the alternative locations would not meet the project's objectives of redeveloping their own property. For this reason, the alternative locations are not considered feasible.

7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussion, the environmentally superior alternative is the No Project Alternative, because all of the project's significant environmental impacts would be avoided. However, Section 15126.6(e)(2) 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."

Based upon the previous discussion, the Reduced Height and Design Alternative would be the environmentally superior alternative, because this alternative would further reduce the less than significant visual and aesthetic, noise, and utility and service system impacts of the proposed project. However, this alternative would not fully meet the project's objectives.

 Table 11
 Matrix Comparison of Project Alternative Impacts

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