

## Chapter IV

### MITIGATION MONITORING AND REPORTING PROGRAM



This Mitigation Monitoring and Reporting Program (see Table 4-1) has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of a mitigation monitoring program when mitigation measures are required to avoid significant impacts. The monitoring program is intended to ensure compliance during implementation of the project.

This Mitigation Monitoring and Reporting Program has been formulated based upon the findings of the Draft EIR and the comments received on the Draft EIR and addressed herein. The Mitigation Monitoring and Reporting Program identifies mitigation measures recommended in the EIR to avoid or reduce identified impacts and specifies the agencies/party responsible for implementation and monitoring. Mitigation measures identified in the Initial Study are also included in the MMRP.

The first column identifies the mitigation measure. The second column entitled "Party Responsible for Ensuring Implementation" refers to the person(s) who will undertake the mitigation measures. The third column entitled "Party Responsible for Monitoring" refers to the person/agency responsible for ensuring that the mitigation measure has been implemented and recorded. The fourth column entitled "Monitoring Timing" identifies when and/or for how long the monitoring shall occur.

For the East Weddell Residential Projects, many of the mitigation measures will be overseen by the City of Sunnyvale Planning Department and Public Works Department.

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 4-1				MITIGATION MONITORING AND REPORTING PROGRAM			
Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification			
				Initial	Date	Project/ Comments	
AESTHETICS							
<u>AESTHETICS-1:</u> The applicants for both projects shall incorporate the following specifications into all construction contracts for the proposed projects:							
<ul style="list-style-type: none"><li>Construction staging areas and the storage of large equipment shall be located in the interior of the project sites as much as possible, and whenever feasible away from East Weddell Drive.</li><li>Construction staging areas shall be on-site and shall remain clear of trash, weeds, and debris.</li><li>Construction fencing shall be placed around the sites and shall include green fabric screening to screen portions of the site from view. The fencing shall be located at the northern and western edges of the Raintree site and the northern and eastern edges of the Sares Regis site.</li></ul>	Applicants	Sunnyvale Community Development Department	At time of contract specifications.				
This measure would reduce the aesthetics impact to a less-than-significant level.							
<u>AESTHETICS-2:</u> No mitigation would be necessary.							
<u>AESTHETICS-3:</u> The applicants for both projects shall incorporate the following specifications into the proposed projects:							
<ul style="list-style-type: none"><li>All lighting shall be shielded so that lighting is cast downward and "spillover" is minimized.</li><li>Lighting for exterior locations shall be designed primarily for public safety and shall not result in unnecessary glare for nearby residences.</li><li>Whenever possible, lighting for pathways shall be low path lighting.</li><li>All garage lighting shall be shielded to minimize spillover to adjacent areas and roadways.</li><li>The overall lighting design approach shall be to provide 1-foot candle of light on all parking lots and major pathways, while ½-foot candle could be provided at minor pedestrian paths.</li><li>Over-lighting shall be prevented and full-cut off fixtures shall be used to minimize light pollution and trespass.</li></ul>	Applicants	Sunnyvale Building Division	At time of review of final drawings.				
The combination of the above measures would reduce this potential impact to a less-than-significant level.							

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AIR QUALTY						
AIR-1: No mitigation would be necessary.						
AIR-2: When construction information is available for the Full Buildout Scenarios, a complete air emissions analysis for construction emissions shall be completed by the project applicants to address annual and average daily construction emissions of reactive organic gases (ROG), nitrogen oxides (NOx), coarse particulate matter (PM10) exhaust, and fine particulate matter (PM2.5) exhaust during construction of the Sares Regis and Raintree projects. Average daily emissions shall be computed from total emissions. Total emissions shall be the sum of the annual emissions. If predicted average daily emissions would exceed the Bay Area Air Quality Management District (BAAQMD) thresholds, the applicants shall identify mitigation measures that would reduce construction-related emissions to below the BAAQMD thresholds. Such measures may include:						
<ul style="list-style-type: none"><li>▪ Phasing of the project to reduce daily emissions;</li><li>▪ Use of newer or retrofitted construction equipment that has low emission rates;</li><li>▪ Use of alternatively fueled equipment; and modification of construction techniques to avoid use of diesel-powered equipment.</li></ul>	Applicants	Sunnyvale Community Development Department and Sunnyvale Building Division	Prior to issuance of building permits.			
Compliance with thresholds shall be verified by the City prior to issuance of any building permits. This measure would reduce the air quality impact to a less-than-significant level.						
AIR-3: No mitigation would be necessary.						
AIR-4: The two projects shall include the following measures to minimize long-term toxic air contaminant (TAC) exposure for new residences.						
<ol style="list-style-type: none"><li>1. Design buildings and sites to limit exposure from sources of TAC and fine particulate matter (PM2.5) emissions. The site layout shall locate windows and air intakes as far as possible from Highway 101 traffic lanes and provide additional tree plantings along the highway edge to maintain a uniform and continuous vegetative barrier per Bay Area Air Quality Management District (BAAQMD) recommended plantings. Any modifications to the site design shall incorporate buffers between residences and the freeway.</li><li>2. Install air filtration in residential or other buildings that would include sensitive</li></ol>	Applicants (working with air pollutant consultant)	Sunnyvale Community Development Department and Sunnyvale Building Division	At time of review of building permit applications and prior to issuance of occupancy permits.			

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<p>receptors that have predicted PM<sub>2.5</sub> concentrations above 0.3 micrograms per cubic meter (µg/m<sup>3</sup>) or excess lifetime cancer risk of 10.0 per million or greater. Air filtration devices shall be rated MERV13 or higher. To ensure adequate health protection to sensitive receptors, a ventilation system shall meet the following minimal design standards (Department of Public Health, City and County of San Francisco, 2008):</p> <ul style="list-style-type: none"> <li>▪ A MERV13 or higher rating ;</li> <li>▪ At least one air exchange(s) per hour of fresh outside filtered air;</li> <li>▪ At least four air exchange(s) per hour recirculation; and</li> <li>▪ At least 0.25 air exchange(s) per hour in unfiltered infiltration.</li> </ul> <p>As part of implementing this measure, an ongoing maintenance plan for the buildings' heating, ventilation, and air conditioning (HVAC) air filtration system shall be required. Recognizing that emissions from air pollution sources are decreasing, the maintenance period shall last as long as significant excess cancer risk or annual PM<sub>2.5</sub> exposures are predicted. Subsequent studies could be conducted to identify the ongoing need for the ventilation systems as future information becomes available.</p>						
3. Ensure that the lease agreement and other property documents (1) require cleaning, maintenance, and monitoring of the affected buildings for air flow leaks; (2) include assurance that new owners and tenants are provided information on the ventilation system; (3) include provisions that fees associated with owning or leasing a unit(s) in the building include funds for cleaning, maintenance, monitoring, and replacements of the filters, as needed; and (4) provide information regarding the ventilation/filtration systems and importance of keeping windows and doors closed to maximize the efficiency of the system..						
4. Consider phasing developments located within 101 meters (330 feet) of Highway 101 to avoid significant excess cancer risks and required installation of filtered ventilation systems (described above). Note that new United States Environmental Protection Agency (U.S. EPA) engines standards combined with California Air Resources Board (CARB) rules and regulations will reduce on-road emissions of diesel particulate matter (DPM) and PM <sub>2.5</sub> substantially, especially after 2014. Any effects of phasing the project shall be verified by an authorized air pollutant consultant approved by the City.						
5. Require that prior to building occupancy, an authorized air pollutant consultant						

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<p>approved by the City shall verify the installation of all necessary measures to reduce toxic air contaminant (TAC) exposure.</p> <p>A properly maintained vegetative barrier could reduce particulate concentrations, including DPM, by an estimated 30 percent. Combined with the vegetation barrier along the freeway, a properly installed and operated ventilation system with MERV13 air filters may reduce PM<sub>2.5</sub> concentrations from DPM mobile and stationary sources by approximately 70 percent indoors when compared to outdoors. A ventilation system with MERV16 filters could achieve reductions of 90 percent. The air intake for these units should be located as far away as possible from Highway 101. The overall effectiveness calculations take into consideration time spent outside and the outdoor exposure of each affected unit. The U.S. EPA reports that people, on average, spend 90 percent of their time indoors (US EPA 2001). The overall effectiveness calculations should take into effect time spent outdoors. Assuming 2 hours of outdoor exposure plus 1 hour of open windows (calculated as outdoor exposure) per day, the overall effectiveness of filtration systems would be about 60 percent for MERV13 systems and about 80 percent for MERV16 systems.</p> <p>A ventilation system with MERV13 filtration would be necessary to reduce cancer risk to less-than-significant levels for areas where cancer risk is between 10 and 25.0 per million. A more efficient filtration system would be required for cancer risks that exceed 25.0 per million. A ventilation system with MERV16 filters would result in cancer risk of less than 10 per million where outdoor cancer risk is predicted to be 50.0 per million or less. A system with MERV14 or MERV15 could also be used, but those systems were not evaluated.</p> <p>PM<sub>2.5</sub> concentrations would also be reduced with the ventilation system that uses a MERV13 filter or greater. Maximum annual PM<sub>2.5</sub> concentrations of 0.75 µg/m<sup>3</sup> or less could be mitigated using ventilation systems with MERV13 filters.</p> <p>In summary, residential units where excess cancer risk is 10 to 25.0 chances per million would require MERV13 or higher filtration and residences with higher excess cancer risk would require MERV16 filters to mitigate levels to less-than-significant levels. Mitigating for excess cancer risk would mitigate significant annual PM<sub>2.5</sub> concentrations to less-than-significant levels. Figures 4.2-4 and 4.2-5 show the unmitigated exposure that can be used as a guide to identify the level of mitigation</p>						

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required.						
The above measures would reduce the potential air quality impact to a less-than-significant level.						
AIR-5a: The projects shall include the following measures recommended by the Bay Area Air Quality Management District (BAAQMD) (i.e., Best Management Practices) to reduce construction dust and on-site construction exhaust emissions by 5 percent:						
1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.						
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.						
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.						
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).						
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.						
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.	Applicants and contractors	Sunnyvale Community Development Department and Sunnyvale Building Division	Prior to issuance of grading and/or building permits (review contract specifications).			
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.						
8. A publicly visible sign shall be posted with the telephone number and person to contact at the City of Sunnyvale regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.						
9. A plan shall be developed demonstrating that the off-road equipment to be used in project construction would achieve an additional 50-percent reduction in exhaust particulate matter emissions, compared to similar equipment based on CARB						

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<p>OFFROAD statewide average emission factors for the projected year of use. Based on the construction plans presented for this project, a feasible method to achieve this objective would be the following:</p> <ul style="list-style-type: none"> <li>All diesel-powered air compressors, welders, forklifts (including rough terrain forklifts), paint spray rigs, and all types of cranes, forklifts or aerial lifts (man lifts, boom lifts, etc.) used during all construction phases shall meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions or substituted with alternatively fueled equipment (e.g., LPG fuel).</li> <li>All other off-road construction equipment used on the site shall, on a fleet-wide average, meet U.S. EPA Tier 2 emission standards.</li> <li>Portable diesel generators operating for more than two days shall be prohibited. Grid power electricity shall be used to provide power at construction sites; or non-diesel generators (or diesel generators using bio-diesel fuel) may be used when grid power electricity is not feasible.</li> </ul> <p>The above measures, which apply to both project-specific and cumulative impacts, shall be included in contract specifications for both projects.</p> <p>The mitigation measures listed above, applied to the Raintree Applicant Proposed Scenario and the Sares Regis Applicant Proposed Scenario, would reduce the child excess cancer risk from each of the projects as well as the combination of the two projects to below 9.9 per million.</p> <p>Construction emissions with Mitigation Measure AIR-5a were computed using the CalEEMod model. These emissions were input to the ISCST3 dispersion model to predict mitigated DPM and PM<sub>2.5</sub> concentrations and the corresponding excess cancer risks. As a result, the maximum excess child cancer risk would be reduced to 7.0 chances per million for the Sares Regis Applicant Proposed Scenario and 6.8 chances per million for the Raintree Applicant Proposed Scenario.</p> <p>Since construction techniques, equipment usage, and schedules have not been identified for the Full Buildout Scenarios, Mitigation Measure AIR-5b is included below.</p>						
<p><u>AIR-5b:</u> When construction information is available for the Full Buildout Scenario, a complete air emissions analysis for construction emissions shall be completed by the project applicants to address health risk impacts (i.e., excess cancer risk, annual PM<sub>2.5</sub> concentration and Hazard Index) during construction of the Sares Regis and Raintree</p>	Applicants	Sunnyvale Community Development	Prior to issuance of building permits.			

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<p>projects. If predicted excess cancer risk, annual PM<sub>2.5</sub> concentration or Hazard Index exceed the BAAQMD thresholds, the applicants shall identify mitigation measures that would reduce construction-related health risks to below the BAAQMD thresholds. Such measures may include:</p> <ul style="list-style-type: none"> <li>Use of newer or retrofitted construction equipment that has low emission rates;</li> <li>Use of alternatively fueled equipment; and</li> <li>Modification of construction techniques to avoid use of diesel-powered equipment.</li> </ul> <p>Compliance with thresholds shall be verified by the City prior to issuance of any building permits. The above measures would reduce the air quality impact to a less-than-significant level.</p>		Department				
AIR-6: No mitigation would be necessary.						
AIR-7: The projects would be required to comply with Mitigation Measures AIR-4 and AIR-5; no additional mitigation would be necessary.		See AIR-4 and AIR-5				
<b>BIOLOGICAL RESOURCES</b>						
<p>BIO-1: Tree removal and building demolition shall be performed in compliance with the Migratory Bird Treaty Act and relevant sections of the California Fish and Wildlife Code. This shall be accomplished by preferably scheduling tree removal and building demolition outside of the bird nesting season (which occurs from February 1 to August 31) to avoid possible impacts to nesting birds if new nests are established in the future. Alternatively, if tree removal and building demolition cannot be scheduled during the non-nesting season (September 1 to January 31), then a preconstruction nesting survey shall be conducted. The preconstruction nesting survey shall include the following:</p> <ul style="list-style-type: none"> <li>A qualified biologist (Biologist) shall conduct a pre-construction nesting bird (both passerine and raptor) survey within seven days prior to tree removal and/or building demolition.</li> <li>If no nesting birds are observed, no further action is required and tree removal and construction activities shall occur within seven days of the survey to prevent take of individual birds that could begin nesting after the survey.</li> <li>Another nest survey shall be conducted if more than seven days elapse between the</li> </ul>	Applicants	Sunnyvale Community Development Department and Sunnyvale Building Division	Prior to removal of any on-site trees; verify completion of study prior to issuance of grading permit; verify restrictions for construction activities at time of site visits.			



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<p>initial nest search and the beginning of tree removal and construction activities.</p> <ul style="list-style-type: none"> <li>If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 75 to 100 feet for passerines and 300 feet for raptors) and other factors such as on-going disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the California Department of Fish and Wildlife (CDFW).</li> <li>Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as surface parking and site maintenance may continue within this buffer zone.</li> <li>No restrictions on grading or construction activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area.</li> <li>Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed.</li> <li>A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the City of Sunnyvale Planning Division prior to initiation of any tree removal or other construction activities within the buffer zone. Following approval by the City, tree removal and construction within the nest-buffer zone may proceed.</li> </ul> <p>This measure would reduce the biological resources impact to a less-than-significant level.</p>						
<p><b>BIO-2:</b> The proposed projects shall comply with the City's Tree Preservation Ordinance. As necessary, additional information shall be provided by the applicants regarding valuation of trees to be preserved and tree preservation guidelines during and after construction. Further review shall be provided to demonstrate adequate replacement plantings, establish an appropriate bond value for trees to be protected, and determine whether soil mitigation and other requirements are necessary.</p> <p>This measure would reduce the biological resources impact to a less-than-significant level.</p>	Applicants	Sunnyvale Community Development Department	Prior to issuance of grading and/or building permit.			

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Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
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GREENHOUSE GAS EMISSIONS						
GHG-1: No mitigation would be necessary.						
GHG-2: No mitigation would be necessary.						
HAZARDS AND HAZARDOUS MATERIALS						
<p><b>HAZARDS-1:</b> Regulatory oversight shall be initiated to develop and implement measures to eliminate potential health risks related to soils containing elevated levels of arsenic and/or vanadium at the Raintree site. This oversight may be provided by Santa Clara County Department of Environmental Health (SCCDEH), the Regional Water Quality Control Board (RWQCB), or Department of Toxic Substances Control (DTSC) and may require the project applicant to submit an application to the State Site Designation Committee for assignment of an appropriate local or state oversight agency. As a condition of approval for construction, demolition, or grading permits, the applicant shall incorporate measures to ensure that any potential added health risks to construction workers, maintenance and utility workers, site users, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than <math>1 \times 10^{-6}</math> (one in one million) for carcinogens and a cumulative hazard index of 1.0 for non-carcinogens, or as otherwise required by a regulatory oversight agency. The evaluation of risk would be subject to review and/or approval by regulatory oversight agencies. These agencies could also require additional site investigation to more fully delineate the extent of contaminants of concern at the site.</p> <p>The potential risks to human health in excess of these goals must be reduced either by remediation of the contaminated soils (e.g., excavation and off-site disposal) and/or implementation of institutional controls and engineering controls (IC/EC). If extensive on-site excavation and/or soil off-haul is determined to be the appropriate response action, additional CEQA review may be required to evaluate potential impacts related to air quality, noise, and traffic and to recommend mitigation measures, as necessary. IC/EC may include the use of a Construction Risk Management Plan (for mitigating exposures during construction and maintenance of the project), placement of new fill or pavement over contaminated soils, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program must be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project. The Operations and</p>						
	Raintree Applicant (working with listed state and regional agencies)	Sunnyvale Community Development (to ensure compliance with regulatory agencies)	Prior to issuance of grading permit.			

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
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Maintenance Program would be subject to review and approval by regulatory oversight agencies. This measure would reduce the hazards and hazardous materials impact to a less-than-significant level.						
<u>HAZARDS-2:</u> Occupancy permits for the Sares Regis site shall be contingent upon the site receiving certification from DTSC that hazardous materials conditions at the Sares Regis site are acceptable for the proposed project. Currently, remedial action is expected to be limited to excavation and off-site disposal of a small volume of soil. Under Voluntary Cleanup Program guidelines, DTSC shall review the remedial action using its Exemption Evaluation Checklist to determine if any additional CEQA review may be required to evaluate potential impacts related to the remedial action. This measure would reduce the hazards and hazardous materials impact to a less-than-significant level.	Sares Regis Applicant (working with DTSC)	Sunnyvale Community Development Department and Sunnyvale Building Division	Prior to issuance of occupancy permit.			
<u>HAZARDS-3:</u> Construction at the project sites shall be conducted under a project-specific Construction Risk Management Plan (CRMP) to protect construction workers, the general public, and the environment from subsurface hazardous materials previously identified and to address the possibility of encountering unknown contamination or hazards in the subsurface. The CRMP shall summarize soil and groundwater analytical data collected on the project sites during past investigations and during site investigation and remediation activities described in Mitigation Measure HAZARDS-1 for the Raintree site; delineate areas of known soil and groundwater contamination, if applicable; and identify soil and groundwater management options for excavated soil and groundwater, in compliance with local, state, and federal statutes and regulations. The CRMP shall: (1) Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively. (2) Require the preparation of a project-specific Health and Safety Plan that identifies hazardous materials present, describes required health and safety provisions and training for all workers potentially exposed to hazardous materials in accordance with state and federal worker safety regulations, and designates the personnel responsible for Health and Safety Plan implementation.	Applicants	Sunnyvale Community Development Department	Review and approval of CRMP prior to issuance of grading, demolition, or building permits.			

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<p>(3) Require the preparation of a contingency plan that shall be applied should previously unknown hazardous materials be encountered during construction activities. The contingency plan shall include provisions that require collection of soil and/or groundwater samples in the newly discovered affected area by a qualified environmental professional prior to further work, as appropriate. The analytical results of the sampling shall be reviewed by the qualified environmental professional and submitted to the appropriate regulatory agency. The environmental professional shall provide recommendations, as applicable, regarding soil/waste management, worker health and safety training, and regulatory agency notifications, in accordance with local, state, and federal requirements. Work shall not resume in the area(s) affected until these recommendations have been implemented under the oversight of the City or regulatory agency, as appropriate</p> <p>(4) Designate personnel responsible for implementation of the CRMP.</p> <p>The CRMP shall be submitted to the City of Sunnyvale for review and approval prior to the issuance of construction and demolition permits.</p> <p>This measure would reduce the hazards and hazardous materials impact to a less-than-significant level.</p>						
<p><u>HAZARDS-4:</u> Hazardous building materials surveys shall be conducted by a qualified and licensed professional for all structures that were not previously inspected or abated and that are proposed for demolition or renovation at the project sites. Lead-based paint shall be included in all hazardous material surveys. All loose and peeling lead-based paint and asbestos-containing materials (ACM) shall be abated by certified contractor(s) in accordance with local, state, and federal requirements. All other hazardous materials, such as "universal wastes," shall be removed from buildings prior to demolition in accordance with Division of Occupational Safety and Health (DOSH) regulations. The completion of the abatement activities shall be documented by a qualified environmental professional(s) and submitted to the City of Sunnyvale prior to the issuance of construction and demolition permits.</p> <p>This measure would reduce the hazards and hazardous materials impact to a less-than-significant level.</p>	Applicants	Sunnyvale Building Division	Prior to issuance of grading or demolition permits.			
<u>HAZARDS-5:</u> No mitigation would be necessary.						

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<u>HAZARDS-6:</u> No mitigation would be necessary.						
<u>HAZARDS-7:</u> No mitigation would be necessary.						
<b>LAND USE AND PLANNING</b>						
<u>LAND-1:</u> No mitigation would be necessary. Refer to other sections of the EIR as related to potential environmental impacts, specifically air quality and noise.						
<b>NOISE</b>						
<u>NOISE-1:</u> The following mitigation measures shall be included in each project to reduce the impact to a less-than-significant level:						
<ul style="list-style-type: none"><li>When refining the project's site plan, continue to locate common outdoor use areas away from roadways and shield noise-sensitive outdoor spaces with buildings whenever possible.</li><li>Incorporate building design and treatments to ensure compliance with State of California and City of Sunnyvale noise standards. A project-specific acoustical analysis shall be required by the City of Sunnyvale to ensure that the design of the project incorporates controls so that interior noise levels would be reduced to 45 dBA DNL or lower. Building sound insulation requirements shall include the provision of forced-air mechanical ventilation for all residential units, so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound-rated windows and doors and building facade treatments) may be required for many residential units facing adjacent roadways. These treatments may include sound-rated windows and doors, sound rated wall constructions, and acoustical caulking. Pursuant to the State Building Code, the results of the analysis, including a description of the necessary noise control measures, shall be submitted to the City along with the building plans and approved prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 dBA DNL or lower.</li><li>A qualified acoustical consultant shall review final site plans, building elevations, and floor plans prior to construction to calculate expected interior and exterior noise levels and ensure compliance with City of Sunnyvale policies and State of California noise</li></ul>	Applicants (working with acoustical consultant)	Sunnyvale Community Development Department	During design review and during final building permit applications.			

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regulations.						
The above measures would reduce the potential noise impact to a less-than-significant level.						
NOISE-2: No mitigation would be necessary.						
NOISE-3: No mitigation would be necessary.						
NOISE-4: No mitigation would be necessary.						
NOISE-5: To mitigate potential short-term construction noise impacts, each project shall be required to comply with the following:						
1. Project construction operations shall be required to use available noise suppression devices and techniques and to limit construction hours per the Sunnyvale Municipal Code.						
2. A construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints shall be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses. The construction noise logistics plan shall include, but not be limited to, the following measures to reduce construction noise levels as low as practical:	Applicants and Contractors	Sunnyvale Community Development Department and Building Division	Review plan prior to issuance of grading or building permit; review contract specifications.			
▪ Use "quiet" models of air compressors and other stationary noise sources where technology exists.						
▪ Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.						
▪ Locate all stationary noise-generating equipment, such as air compressors, portable power generators, and crushing/recycling operations, near U.S. Highway 101 and as far away as possible from adjacent land uses.						
▪ Locate staging areas and construction material areas as far away as possible from adjacent land uses.						
▪ Prohibit all unnecessary idling of internal combustion engines.						
▪ Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator						

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<p>would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented.</p> <ul style="list-style-type: none"> <li>Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.</li> </ul> <p>The potential short-term noise impacts associated with construction would be mitigated by the above measures implemented during all phases of construction activity to minimize the exposure of neighboring properties, and in combination with the limitations on hours set forth in the Sunnyvale Municipal Code. The impact would be mitigated to a less-than-significant level with the implementation of the above measures.</p>						
NOISE-6: No mitigation would be necessary.						
PUBLIC SERVICES						
SERVICES-1: The environmental impact would be less than significant, and no mitigation is necessary.						
SERVICES-2: The environmental impact would be less than significant, and no mitigation is necessary.						
SERVICES-3: The environmental impact would be less than significant, and no mitigation is necessary. As a condition of project approval, the project applicants would be required to pay standard school impact fees. As provided by state law, the payment of these fees is deemed to fully mitigate the impacts of new development on school services.	Applicants	Sunnyvale Community Development Department and Sunnyvale Building Division	At time of building permit application.			
RECREATION						
REC-1: As a condition of project approval, each project shall be required to comply with applicable City of Sunnyvale parkland dedication and in-lieu fee requirements. Compliance with these requirements would ensure that the impact of each project on existing parks and demand for new parkland would be reduced to a less-than-significant level.	Applicants	Sunnyvale Community Development Department	At time of building permit application.			

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM				Compliance Verification		
Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Initial	Date	Project/ Comments
REC-2: Each project shall comply with Mitigation Measure REC-1 and all other applicable mitigation measures identified in this EIR. Compliance with these measures would ensure that the impact of recreational facilities included in each project would be reduced to a less-than-significant level.	See REC-1					
TRANSPORTATION						
TRANSPORTATION-1: No mitigation measures would be necessary under Baseline-Plus Project Conditions.						
TRANSPORTATION-2: No mitigation measures would be necessary under Baseline-Plus Project Conditions.						
TRANSPORTATION-3: No mitigation measures would be necessary under Baseline-Plus Project Conditions.						
TRANSPORTATION-4: No mitigation measures would be necessary under Baseline-Plus-Project Conditions.						
TRANSPORTATION-5: No mitigation measures would be necessary under Baseline-Plus-Project Conditions.						
TRANSPORTATION-6: No mitigation measures would be necessary under Baseline-Plus-Project Conditions.						
TRANSPORTATION-7: No mitigation measures would be necessary under Background-Plus-Project Conditions.						
TRANSPORTATION-8: No mitigation measures would be necessary under the Cumulative-Plus-Project Conditions.						



TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
				Initial	Date	Project/ Comments
<u>TRANSPORTATION-9:</u> Both project sites shall be designed to incorporate emergency vehicle access that meets City emergency access standards as described in the City of Sunnyvale Department of Public Safety Fire Prevention Unit's Requirements for Fire Department Vehicle Access and is approved by the City Fire Marshal. This mitigation would reduce the impact on emergency access to a less-than-significant level.	Applicants	Sunnyvale Community Development Department, working with Sunnyvale Department of Public Safety	During site plan review.			
<u>TRANSPORTATION-10:</u> Both project sites shall be designed to integrate improvements with existing pedestrian facilities to accommodate potential increases in pedestrian activity. If the SFPUC does not approve the proposed pedestrian improvements, the site plans for both projects shall be adjusted to maximize pedestrian use near the SFPUC right-of-way (ROW), and this shall occur prior to issuance of any building permits. This measure would reduce the transportation impact to a less-than-significant level.	Applicants	Sunnyvale Community Development Department and City Traffic Engineer	Prior to issuance of building permits.			
<u>TRANSPORTATION-11:</u> Both project sites shall be designed to integrate with existing bicycle facilities to accommodate potential increases in bicycle activity. On-site facilities for bicycles shall be consistent with VTA and City of Sunnyvale guidelines for such facilities, including parking and storage on both project sites. If the SFPUC does not approve the proposed bicycle improvements, the site plan for the Raintree site shall be adjusted to maximize bicycle use near the SFPUC right-of-way, and this shall occur prior to issuance of any building permits. This measure would reduce the transportation impact to a less-than-significant level.	Applicants	Sunnyvale Community Development Department and City Traffic Engineer	Prior to issuance of building permits.			
<u>TRANSPORTATION-12:</u> No mitigation measures would be necessary.						
<u>TRANSPORTATION-13:</u> Each project applicant shall prepare a construction truck traffic program for approval by the City of Sunnyvale. The program shall recommend city-designated truck routes and avoids AM and PM commute peak periods (7:00-9:00 AM and 4:00-6:00 PM) in order to avoid impacts on the local roadway system and also to avoid residential neighborhoods. This program shall be integrated into contract specifications. With implementation of this program, each project would result in a less than significant impact.	Applicants	Sunnyvale Community Development Department and City Traffic Engineer	Review and approval of contract specifications prior to issuance of building permits.			

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
				Initial	Date	Project/ Comments
<u>TRANSPORTATION-14:</u> No mitigation measures would be necessary.						
<u>UTILITIES AND SERVICE SYSTEMS</u>						
<u>UTIL-1:</u> The impact would be less than significant, and no mitigation is necessary.						
<u>UTIL-2:</u> The impact would be less than significant, and no mitigation is necessary.						
<u>UTIL-3:</u> As part of the proposed projects, the project applicants shall replace the existing 8-inch sewer main in North Fair Oaks Avenue with a 10-inch main, in accordance with City of Sunnyvale Department of Public Works requirements. This measure would reduce the impact to a less-than-significant level.	Applicants (likely to be via funding mechanism with the City)	Sunnyvale Public Works Department	Prior to issuance of occupancy permit.			
<u>UTIL-4:</u> The impact would be less than significant, and no mitigation is necessary.						
<u>UTIL-5:</u> The impact would be less than significant, and no mitigation is necessary.						
<u>UTIL-6:</u> Each project applicant shall prepare a Waste Management Plan for City approval. The Waste Management Plan shall include provisions for deconstructing existing buildings to facilitate salvaging their reusable components, recycling demolition wastes, reusing or recycling unused construction materials, and ensuring that residents participate in the multi-family recycling service provided by the City to the project after it is occupied. The Waste Management Plan shall describe the projected quantities of waste generated during demolition and construction; indicate how much of those materials will be reused, recycled, or otherwise diverted from landfills; and indicate where un-recycled materials will be disposed. The Waste Management Plan shall also describe where and how post-occupancy discarded materials will be stored and moved to collection points and how residents and project staff (e.g., maintenance workers) will be informed and motivated, on an ongoing basis, to handle discarded materials to support the City's diversion goals. Upon completion of each project, each project applicant shall document implementation of the Waste Management Plan by providing the City with a report summarizing the waste type, quantity, disposition (e.g., recycled or landfilled), and the facility used. This measure would reduce the impact to a less-than-significant level.	Applicants	Sunnyvale Community Development Department and Sunnyvale Building Division	Prior to issuance of demolition permit.			

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
				Initial	Date	Project/ Comments
MEASURES IDENTIFIED IN INITIAL STUDY FOR EAST WEDDELL RESIDENTIAL PROJECTS (MAY 2013)						
<p><b>CULTURAL-1:</b> Each project applicant shall retain a qualified archaeologist to monitor project ground-disturbing activities. Prior to project ground-disturbing activities, the archaeologist shall prepare a Monitoring Plan for the project. The Monitoring Plan shall describe the specific methods and procedures that will be used in the event that archaeological deposits are identified.</p> <p>Archaeological monitors shall be empowered to halt construction activities at the location of a discovery to review possible archaeological material and to protect the resource while the finds are being evaluated. Monitoring shall continue until, in the archaeologist's judgment, cultural resources are not likely to be encountered.</p> <p>If archaeological materials are encountered during project activities, all work within 25 feet of the discovery shall be redirected until the archaeologist assesses the finds, consults with agencies as appropriate, and makes recommendations for the treatment of the discovery. If avoidance of the archaeological deposit is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing in the California Register of Historical Resources. If the deposits are not eligible, mitigation is not necessary. If the deposits are eligible, adverse effects on the deposits shall be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and a technical data recovery report at a curation facility.</p> <p>Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to the City of Sunnyvale and the Northwest Information Center at Sonoma State University upon completion of the resource assessment.</p>	Applicants and Contractors	Sunnyvale Community Development Department	Review and approval of Monitoring Plan prior to issuance of grading permit. Review and approval of assessment report, if applicable, prior to issuance of building permit.			
<p><b>CULTURAL-2:</b> On each project site, should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist shall be contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found the resources are to be significant, and project activities cannot avoid the resources, adverse effects on paleontological resources shall be mitigated. Mitigation may include monitoring, recording of the fossil locality, data recovery</p>	Applicants and Contractors	Sunnyvale Community Development Department	Review of contract specifications prior to issuance of grading permit. Review and approval of			

TABLE 4-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party Responsible for Ensuring Implementation	Party Responsible for Monitoring	Monitoring Timing	Compliance Verification		
				Initial	Date	Project/ Comments
<p>and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Sunnyvale for review. If paleontological materials are recovered, the report shall also be submitted to a paleontological repository, such as the University of California Museum of Paleontology.</p> <p>Each project applicant shall inform its contractor(s) of the sensitivity of the project area for paleontological resources. The City shall verify that the following directive has been included in the appropriate construction documents:</p> <p>"The subsurface of the construction site may be sensitive for paleontological resources. If paleontological resources are encountered during project subsurface construction and a paleontologist is not on-site, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Paleontological resources include fossil plants and animals, and such trace fossil evidence of past life as tracks. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, ground sloth, dire wolf, and bison. Paleontological resources also include plant imprints, petrified wood, and animal tracks."</p>			assessment report, if applicable, prior to issuance of building permit.			
<p>GEO-1: For each project, prior to the issuance of any grading or construction permits, a design-level geotechnical investigation shall be prepared by a licensed professional and submitted to the City Engineer for review and approval. The investigation shall verify that the project plans comply with CBC and City requirements and incorporate the recommendations for design contained in preliminary geotechnical reports. All design measures, recommendations, design criteria, and specifications set forth in the design-level geotechnical investigation shall be implemented as a condition of project approval.</p>	Applicants	Sunnyvale Community Development Department, Sunnyvale City Engineer, and Sunnyvale Building Division	Prior to issuance of grading or building permit.			