

MITIGATION MONITORING AND REPORTING PROGRAM**TABLE B-1**
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Mitigation Measure	Requirements of Measure	Compliance Method	Verification/Timing	Responsible Party
Air Quality				
MM 3.5.3a	<p>Prior to the issuance of grading or building permits, the City of Sunnyvale shall ensure that the Bay Area Air Quality Management District's (BAAQMD) basic construction mitigation measures from Table 8-1 of the BAAQMD 2011 CEQA Air Quality Guidelines (or subsequent updates) are noted on the construction documents. These basic construction mitigation measures include the following:</p> <ol style="list-style-type: none"> 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. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 7. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. 	<ul style="list-style-type: none"> • Plan approval 	<ul style="list-style-type: none"> • Prior to issuance of grading or building permits • During construction 	<ul style="list-style-type: none"> • City of Sunnyvale (plan check) • Project applicant (during construction)
MM 3.5.3b	<p>In the cases where construction projects are projected to exceed the Bay Area Air Quality Management District's (BAAQMD) air pollutant significance thresholds for NO_x, PM₁₀, and/or PM_{2.5}, all off-road diesel-fueled equipment (e.g., rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors) shall be at least California Air Resources Board</p>	<ul style="list-style-type: none"> • Site inspection 	<ul style="list-style-type: none"> • During construction 	<ul style="list-style-type: none"> • Project applicant (during construction) • City of

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	(CARB) Tier 3 Certified or better.			Sunnyvale (during construction)
MM 3.5.5	<p>In the case when a subsequent project's construction is span greater than 5 acres and is scheduled to last more than two years, the subsequent project shall be required to prepare a site-specific construction pollutant mitigation plan in consultation with the Bay Area Air Quality Management District (BAAQMD) staff prior to the issuance of grading permits. A project-specific construction-related dispersion modeling acceptable to BAAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If BAAQMD risk thresholds (i.e., probability of contracting cancer is greater than 10 in 1 million) would be exceeded, mitigation measures shall be identified in the construction pollutant mitigation plan to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure construction contracts include all identified measures and that the measures reduce the health risk below BAAQMD risk thresholds. Construction pollutant mitigation plan measures shall include, but not be limited to:</p> <ol style="list-style-type: none"> 1. Limiting the amount of acreage to be graded in a single day, 2. Restricting intensive equipment usage and intensive ground disturbance to hours outside of normal preschool hours, 3. Notification of affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocation of outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event that complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such a measure may include the relocation of equipment. 	<ul style="list-style-type: none"> • Plan approval 	<ul style="list-style-type: none"> • Prior to issuance of grading permit 	<ul style="list-style-type: none"> • City of Sunnyvale (plan check) • Project applicant (during construction)
MM 3.5.6	<p>The following measures shall be utilized in site planning and building designs to reduce TAC and PM_{2.5} exposure where new receptors are located within 1,000 feet of emission sources:</p> <ul style="list-style-type: none"> • Future development with the LSAP that includes sensitive receptors (such as residences, schools, hospitals, daycare centers, or retirement homes) located 	<ul style="list-style-type: none"> • Plan approval 	<ul style="list-style-type: none"> • Prior to issuance of grading or building permit 	<ul style="list-style-type: none"> • City of Sunnyvale

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	<p>within 1,000 feet from Caltrain and/or stationary sources shall require site-specific analysis to determine the level of health risk. This analysis shall be conducted following procedures outlined by BAAQMD. If the site-specific analysis reveals significant exposures from all sources (i.e., health risk in terms of excess cancer risk greater than 100 in one million, acute or chronic hazards with a hazard Index greater than 10, or annual PM_{2.5} exposures greater than 0.8 µg/m³) measures shall be employed to reduce the risk to below the threshold (e.g., electrostatic filtering systems or equivalent systems and location of vents away from TAC sources). If this is not possible, the sensitive receptors shall be relocated.</p> <ul style="list-style-type: none"> Future nonresidential developments projected to generate more than 100 heavy-duty trucks daily will be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a hazard Index greater than 1.0, or annual PM_{2.5} exposures greater than 0.3 µg/m³. 			
Biological Resources				
MM 3.9.1	<p>If clearing and construction activities will occur during the nesting period for burrowing owls (February 1–August 31) on the vacant portion of the Corn Palace property, a qualified biologist shall conduct focused surveys for burrowing owls on and adjacent to the project site. Surveys shall be conducted in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation, published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.</p> <p>If no burrowing owls are detected, no further mitigation is required. If active burrowing owls are detected, the project proponent will implement the avoidance, minimization, and mitigation methodologies outlined in the CDFW's Staff Report prior to initiating project-related activities that may impact burrowing owls.</p>	<ul style="list-style-type: none"> Preconstruction surveys for work done between February 1 and August 31 	<ul style="list-style-type: none"> Up to 14 days prior to construction 	<ul style="list-style-type: none"> Project applicant (survey and protection measures)) City of Sunnyvale (document compliance)
MM 3.9.2	<p>Prior to the removal of trees or the demolition of buildings, a bat survey shall be performed by a qualified biologist no more than 3 days prior to the start of construction activities. If bat roosts are identified, the City shall require that the bats be safely flushed from the sites where roosting habitat is planned to be removed. If maternity roosts are identified during the maternity roosting season (typically May to September) they must remain undisturbed until a qualified biologist has determined the young bats are no longer roosting. If roosting is found to occur on-site, replacement roost habitat (e.g., bat boxes) shall be</p>	<ul style="list-style-type: none"> Preconstruction surveys 	<ul style="list-style-type: none"> No more than 3 days prior to building demolition and/or tree removal 	<ul style="list-style-type: none"> Project applicant (survey and protection measures) City of Sunnyvale

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	<p>provided to offset roosting sites removed. If no bat roosts are detected, no further action is required if the trees and buildings are removed prior to the next breeding season.</p> <p>If a female or maternity colony of bats is found on the project site, and the project can be constructed without the elimination or disturbance of the roosting colony (e.g., if the colony roosts in a large oak tree not planned for removal), a qualified biologist shall determine what buffer zones shall be employed to ensure the continued success of the colony. Such buffer zones may include a construction-free barrier of 200 feet from the roost and/or the timing of the construction activities outside of the maternity roost season (after July 31 and before March 1).</p> <p>If an active nursery roost is documented on-site and the project cannot be conducted outside of the maternity roosting season, bats shall be excluded from the site after July 31 and before March 1 to prevent the formation of maternity colonies. Nonbreeding bats shall be safely evicted, under the direction of a bat specialist.</p>			(document compliance)
MM 3.9.3	<p>All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.</p> <p>If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusion zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.</p>	<ul style="list-style-type: none"> • Preconstruction surveys for work done between January 15 and August 31 	<ul style="list-style-type: none"> • No more than 3 days prior to tree removal and/or site preparation involving removal of vegetation 	<ul style="list-style-type: none"> • Project applicant (survey and protection measures) • City of Sunnyvale (document compliance)
Cultural Resources				
MM 3.10.2	All subsequent projects within the LSAP plan area shall be required to include information on the improvement plans that if, during the course of grading or	<ul style="list-style-type: none"> • Plan approval 	<ul style="list-style-type: none"> • During construction 	<ul style="list-style-type: none"> • City of Sunnyvale

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	construction cultural resources (i.e., prehistoric or historic sites) are discovered, work will stop in that area and within 100 feet of the find until a qualified archaeologist can access the significance of the find and, if necessary, develop appropriate treatment measures as part of a treatment plan in consultation with the City and all other appropriate agencies. The treatment plan shall include measures to document and protect the discovered resource. Consistent with CEQA Guidelines Section 15126.4(b)(3), preservation in place will be the preferred method of mitigating impacts to the discovered resource. Pursuant to Government Code Section 6254.10, information on the discovered resource shall be confidential.			(plan check) <ul style="list-style-type: none"> Project applicant (if resources found)
Geology, Soils, and Paleontological Resources				
MM 3.7.4	All subsequent projects within the LSAP plan area shall be required to include information on the improvement plans that if, during the course of grading or construction fossils are discovered, work shall be halted immediately within 50 feet of the discovery, the Sunnyvale Community Development Department shall be notified, and the significance of the find and recommended actions are determined by a qualified paleontologist. In addition, prior to the commencement of project site preparation, all construction personnel shall be informed of the potential to discover fossils and the procedures to follow.	<ul style="list-style-type: none"> Plan approval 	<ul style="list-style-type: none"> Prior to issuance of grading permit During construction 	<ul style="list-style-type: none"> City of Sunnyvale (plan check) Project applicant (if fossils discovered)
Hazards and Hazardous Materials				
MM 3.3.3	<p>The City shall require a Phase I Environmental Site Assessment (ESA) prepared and submitted with any application for new development or redevelopment in any LSAP subarea north of the Caltrain tracks, the Peninsula subarea, the Lawrence/Reed/Willow subarea, or the Corn Palace property. The Phase I ESA shall be prepared by a qualified professional registered in California and in accordance with ASTM E1527-13 (or the most current version at the time a development application is submitted for the project).</p> <p>If determined necessary by the Phase I ESA, a Phase II ESA shall be conducted to determine the lateral and vertical extent of soil, groundwater, and/or soil vapor contamination, as recommended by the Phase I ESA.</p> <p>The City shall not issue a building permit for a site where contamination has been identified until remediation or effective site management controls appropriate for the use of the site have been completed consistent with applicable regulations and to the satisfaction of the City of Sunnyvale, DTSC, or San Francisco Bay RWQCB (as appropriate) prior to initiation of construction activities. Deed restrictions, if appropriate, shall be recorded.</p>	<ul style="list-style-type: none"> Review of Phase I and/or Phase II ESA Site inspection 	<ul style="list-style-type: none"> Phase I at the time development application is submitted Phase II prior to building permit issuance Site inspection during construction 	<ul style="list-style-type: none"> Project applicant (Phase I/Phase II) City of Sunnyvale (document compliance)

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	<p>If temporary dewatering is required during construction or if permanent dewatering is required for subterranean features, the City shall not issue an improvement permit or building permit until documentation has been provided to the City that the Water Pollution Control Plant has approved the discharge to the sewer. Discharge of any groundwater removed from a construction site in any LSAP subarea north of the Caltrain tracks, the Peninsula subarea, the Lawrence/Reed/Willow subarea, or the Corn Palace property to the El Camino Storm Drain Channel, Calabazas Creek, or storm drain shall be prohibited. The City shall ensure all plans and permits state this prohibition.</p> <p>If the Phase I ESA determines there are no recognized environmental conditions (RECs), no further action is required. However, the City shall ensure any grading or improvement plan or building permit includes a statement if hazardous materials contamination is discovered or suspected during construction activities, all work shall stop immediately until a qualified professional has determined an appropriate course of action.</p>			
MM 3.3.5	<p>Prior to issuance of a permit for a specific development project or prior to approving a City-initiated roadway improvement identified in the LSAP, the City shall determine whether project construction activities have the potential to affect traffic conditions on roadways as a result of construction of the development project or roadway improvement(s). If there is the potential the activities could impair or inhibit emergency response or evacuation, a Construction Traffic Control Plan shall be prepared for City review and approval. The plan shall include, but not be limited to, schedule of construction and anticipated methods of handling traffic for each phase of construction to ensure the safe flow of traffic and adequate emergency access, including maintaining an open lane for vehicle travel at all times. All traffic control measures shall conform to City of Sunnyvale, Santa Clara County, and/or Caltrans standards, as applicable. The City shall ensure final approved plans for private development projects specify the requirement, as appropriate, to implement the construction traffic control plan.</p>	<ul style="list-style-type: none"> Plan approval 	<ul style="list-style-type: none"> Prior to permit issuance 	<ul style="list-style-type: none"> City of Sunnyvale (plan check and inspection) Project applicant (prepare plan)
Hydrology and Water Quality				
MM 3.8.3	<p>Prior to approving any subsequent projects in the LSAP at any location where fill is placed in the FEMA AO zone to elevate the ground surface above the base flood elevation, the project applicant shall submit a hydraulic analysis prepared by a California-registered professional engineer for City Engineer review and approval. The analysis shall, at a minimum, identify: (1) the specific locations</p>	<ul style="list-style-type: none"> Plan approval 	<ul style="list-style-type: none"> Prior to grading permit issuance 	<ul style="list-style-type: none"> City of Sunnyvale (plan check) Project applicant

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	where changes in water surface elevations due to fill encroachment could occur; and (2) drainage improvements that will be used to ensure placement of fill will not increase flood hazards in areas not previously subject to flooding during occurrence of the base flood discharge.			(hydraulic analysis)
Noise				
MM 3.6.4	<p>Subsequent projects in the LSAP shall employ site-specific noise attenuation measures during construction to reduce the generation of construction noise. These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by the City of Sunnyvale Building Services Division. Measures specified in the Noise Control Plan and implemented during construction shall include, at a minimum, the following noise control strategies:</p> <ul style="list-style-type: none"> • Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds. • Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used. • Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures. • Noise reducing pile-driving techniques shall be employed during project construction. These techniques shall include: <ul style="list-style-type: none"> ○ Installing intake and exhaust mufflers on pile-driving equipment. ○ Vibrating piles into place when feasible, and installing shrouds around the pile-driving hammer where feasible. ○ Implement “quiet” pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving 	<ul style="list-style-type: none"> • Plan approval 	<ul style="list-style-type: none"> • Prior to issuance of grading and/or building permits 	<ul style="list-style-type: none"> • City of Sunnyvale (plan check and inspection) • Project applicant (during construction)

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	<p>duration), where feasible, in consideration of geotechnical and structural requirements and conditions.</p> <ul style="list-style-type: none"> o Use cushion blocks to dampen impact noise, if feasible based on soil conditions. Cushion blocks are blocks of material that are used with impact hammer pile drivers. They consist of blocks of material placed atop a piling during installation to minimize noise generated when driving the pile. Materials typically used for cushion blocks include wood, nylon and micarta (a composite material). o At least 48 hours prior to pile-driving activities, the applicant shall notify building owners and occupants within 600 feet of the project area of the dates, hours, and expected duration of such activities. 			
Transportation and Circulation				
MM 3.4.6	<p>Should the proposed Land Use and Transportation Element update not be adopted, the following roadway improvements are required as a component of the implementation of the LSAP:</p> <ul style="list-style-type: none"> • <u>Wolfe Road & Kifer Road</u> – Construction of a second southbound left-turn lane and a second westbound left-turn lane. Both left-turn lanes would need to have the same length as the original left-turn lane. Depending on the width of each travel lane, the north and east legs of the intersection will need to be widened between 8 feet and 11 feet. The through lanes at this intersection will be realigned. The required right-of-way would need to be acquired from the northwest, northeast, and/or southeast quadrants of the intersection. Existing bicycle and pedestrian facilities will be retained. This improvement would be a requirement for projects within the LSAP only and not a citywide requirement. <p>With this improvement, the intersection would operate at an acceptable LOS D during the AM peak hour. There would be secondary deficiencies associated with this improvement such as increased pedestrian and bicyclist exposure to traffic when crossing the intersection. The increased exposure time would range from approximately 2 to 3 seconds for pedestrians and from 1 to 2 seconds for bicyclists. This increased exposure time would be minimal. Located in an industrial area and immediately between the rail tracks and Central Expressway, this intersection is also not expected to serve a considerable amount of pedestrian and bicyclist volume. The required right-of-way acquisition would be minimal and would not displace businesses or parking spaces. This improvement would be a requirement for</p>	<ul style="list-style-type: none"> • LSAP approval 	<ul style="list-style-type: none"> • Incorporated into LSAP should Draft LUTE not be adopted • Implemented during future development projects in LSAP only if Draft LUTE not adopted 	<ul style="list-style-type: none"> • City of Sunnyvale Planning Department

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	<p>project within the LSAP only and not a citywide requirement.</p> <ul style="list-style-type: none"> • <u>Wolfe Road & Fremont Avenue</u> – Construction of an exclusive southbound right-turn lane for the length of the segment. The eastbound inner left-turn lane will require restricting the U-turn movement to allow a southbound overlap right-turn phase. Vehicles wishing to perform the eastbound U-turn movement would instead perform the U-turn at Eleanor Way. Depending on the extent of the median on the north leg that could be removed, the north leg would be widened between 3 and 11 feet. The north leg would be realigned to accommodate the southbound right turn. There is existing right-of-way on the northeast quadrant of the intersection. <p>With this improvement, the intersection would operate at an unacceptable LOS E during the PM peak hour, but would no longer have an LSAP intersection deficiency. Secondary deficiencies on the pedestrian and bicycle facilities associated with this improvement would not be considerable. The increased exposure time would range from approximately 1 to 3 seconds for pedestrians and from 1 to 2 seconds for bicyclists. This increased exposure time would be minimal. The required right-of-way acquisition would be minimal and would not displace businesses. This improvement would be a requirement for projects within the LSAP only and not a citywide requirement.</p>			