





TABLE OF APPLICABLE MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be	Staff Use Only
In accordance with the PCAPCD, the applicant shall comply with all applicable rules and regulations as listed above (e.g., Rule 202, 218 and 228). In addition, at the time of tentative map the applicant(s) shall implement a minimum of five (5) of the following measures unless superseded by state or other more stringent standards: The following mitigation measures shall be implemented to reduce short-term construction-related air quality impacts. In addition, dust control measures are required to be implemented by all projects in accordance with the City of Roseville Grading Ordinance, and the PCAPCD Fugitive Dust Rule 228. • Applicant shall submit to PCAPCD a Construction Emission / Dust Control Plan within 30 days prior to groundbreaking. If the PCAPCD does not respond within 20 days, the plan shall be considered approved. The plan must address the minimum requirements found in section 300 and 400 of District Rule 228, Fugitive Dust (www.placer.ca.gov/airpollution/airpolut.htm). The applicant shall keep a hard or electronic copy of Rule 228, Fugitive Dust on-site for reference. • The Construction Emission/Dust Control Plan shall include a comprehensive inventory (i.e. make, model, year, emission rating) of all heavy-duty off-road equipment (50 horsepower (HP) of greater) that will be used an aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall the prime contractor shall contact the APCD prior to the new equipment being utilized. The project representative shall provide PCAPCD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The plan shall demonstrate that the heavy-duty (> 50 HP) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20% NO _X reduction and 45% particulate reduction compared to the most recent ARB fleet average. P	The applicants shall submit construction management plans as part of the Grading Permit application. Engineering will review plans for inclusion of these measures prior to issuance of permits or approval of plans.	Pre-Construction: Prior to issuance of Grading Permits or Improvement Plans. Add as note on Improvement Plans.	Engineering	Dust Control Plan and proof of submittal to PCAPCD	
The following measures are also included to reduce construction-related ROG, NOx, PM10 and PM2.5 emissions:					
 All construction equipment shall be maintained in good operating condition. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specifications. Maintenance records shall be available at the construction site for verification. This measure will reduce combustion emissions of all criteria air pollutants. 					
 Prior to the issuance of any grading permits, all applicants shall submit construction plans denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction will be used, or that their use was investigated and found to be infeasible for the project. Low emission equipment is defined as meeting the California Air Resources Board's Tier III standards. Contractors shall also conform to any construction measures imposed by the PCAPCD as well as City Planning Staff. This measure will primarily reduce ROG, NOx, PM10, and PM2.5 exhaust emissions. 					

Attachment 1					

- Paints and coating shall be applied either by hand or by high volume, low-pressure spray. This
 measure will reduce evaporative ROG emissions.
- All construction shall comply with the following measures to reduce fugitive dust related emissions of PM10 and PM2.5:
 - Maintain a minimum 24-inch freeboard on soil haul trucks or cover payloads using tarps or other suitable means.
 - Suspend grading operations during high winds (greater than 15 mph).
 - Sweep streets as necessary if silt is carried off-site to adjacent public thoroughfares or occurs as a result of hauling.
 - Dispose of surplus excavated material in accordance with local ordinances and use sound engineering practices.
 - Schedule activities to minimize the amounts of exposed excavated soil during and after the end of work periods.
 - Phase grading into smaller areas to prevent the susceptibility of larger areas to erosion over extended periods of time.
 - o Pave or apply gravel to anyon-site haul roads.
 - o Reestablish ground cover on the construction site through seeding andwater.
 - Clean earth moving construction equipment with water or sweep clean, once per day, or as necessary (e.g., when moving onsite), consistent with National Pollutant Discharge Elimination System Best Management Practices and the Roseville Grading Ordinance. Water shall be applied to control dust as needed to prevent dust impacts offsite. Operational water truck(s), shall be on-site, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned, as needed, to prevent dust, silt, mud, and dirt from being released or tracked offsite
 - Spread soil binders on unpaved roads and employee/equipment parking areas. Soil binders shall be non-toxic in accordance with state and local regulations. Apply approved chemical soil stabilizers, or vegetated mats, etc. according to manufacturers' specifications, to all-inactive construction areas (previously graded areas which remain inactive for 96 hours).
 - o Minimize diesel idling time to a maximum of five minutes.
 - Utilize existing power sources (e.g., power poles) or clean fuel generators ratherthan temporary diesel power generators, if feasible.
 - An applicant representative, ARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely (i.e., once per week) evaluate project related off-road and heavy-duty on-road equipment emissions for compliance with this requirement for projects grading more than 20 acres in size, regardless of how many acres are to be disturbed daily.
 - Construction equipment exhaust emissions shall not exceed the PCAPCD Visible Emissions Rule 202. Fugitive dust is not to exceed 40% opacity and not go beyond property boundary at any time. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified and the equipment must be repaired within 72 hours.

The following measures will be required:

- 1. Include the following standard note on the Improvement/Grading Plan: If required by the Public Works Department, the contractor shall hold a pre-construction meeting prior to grading activities. The contractor shall invite the Placer County APCD to the pre-construction meeting in order to discuss the construction emission/dust control plan with employees and/or contractors.
- 2. Prior to building permit approval, the applicant shall show, on the plans submitted to the Building Department, that electrical outlets shall be installed on the exterior walls of both the front and back of all residences or all commercial buildings to promote the use of electric landscape maintenance equipment.
- 3. Prior to building permit approval, the applicant shall show, on the plans submitted to the Building Department, provisions for construction of new residences, and where natural gas is available, the installation of a gas outlet for use with outdoor cooking appliances, such as a gas barbecue or outdoor recreational fire pits.
- 4. Prior to building permit approval, in accordance with District Rule 225, only U.S. EPA Phase II certified wood burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed a cumulative total of 7.5 grams per hourfor

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all devices. Masonry fireplaces shall have either an EPA certified Phase II wood burning device or shall be a U.L. Listed Decorative Gas Appliance. (Rule 225)					
 Wood burning or Pellet appliances shall not be permitted in multi-family developments. Only natural gas or propane fired fireplace appliances are permitted. These appliances shall be clearly delineated on the Floor Plans submitted in conjunction with the Building Permit application. (Rule 225 / section 302.2) 					
Prior to the issuance of a Building Permit, the applicant shall show that all flat roofs with parapets shall include a white or silver cap sheet to reduce energy demands.					
7. Diesel trucks shall be prohibited from idling more than five minutes. Prior to the issuance of a Building Permit, the applicant shall show that all truck loading and unloading docks shall be equipped with one 110/208 volt power outlet for every two dock doors. Diesel Trucks idling for more than five minutes shall be required to connect to the 110/208 volt power to run any auxiliary equipment. 2'x3' signage which indicates "Diesel engine Idling Limited to a Maximum of 5 Minutes" shall be shown on the building elevations and shall be submitted to the Placer County APCD prior to the issuance of Building Permits for the project.					
8. Prior to approval of Improvement Plans, an enforcement plan shall be established, and submitted to the APCD for review, in order to evaluate project-related on-and-off- road heavy-duty vehicle engine emission opacities on a weekly basis, using standards as defined in California Code of Regulations, Title 13, Sections 2180 – 2194. An Environmental Coordinator, hired by the prime contractor or property owner, and who is CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project related off-road and heavy duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified by APCD and the equipment must be repaired within 72 hours. (California Code of Regulations, Title 13, Sections 2180 – 2194)					
The project shall comply with all applicable Placer County Air Pollution Control District rules and regulations, and shall obtain applicable permits and/or clearances from the District prior to the start of construction.					
 The contractor shall use CARB ultra-low sulfur diesel fuel for all diesel—powered equipment. In addition, low sulfur fuel shall be utilized for all stationary equipment. (California Standards for Motor Vehicle Diesel Fuel, title 13, article 4.8, chapter 9, California Code of Regulations). 					
 Processes that discharge 2 pounds per day or more of air contaminants, as defined by Health and Safety Code Section 39013, to the atmosphere may require a permit. Permits are required for both construction and operation. Developers/contractors should contact the District prior to construction and obtain any necessary permits prior to the issuance of a Building Permit. (Rule 501) 					
 Pursuant to the Placer County Air Pollution Control District Rule 501, General Permit Requirements, the proposed project may need a permit from the District prior to construction. In general, any engine greater than 50 brake horsepower or any boiler with heat greater than 1,000,000 Btu per hour shall require a permit issued by the District. (Rule 501) 					
 All on-site stationary equipment which is classified as 50 hp or greater shall either obtain a state issued portable equipment permit or a Placer County APCD issued portable equipment permit. (California Portable Equipment Registration Program, Section 2452). 					
 The contractor shall utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators if feasible. 					
 During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment. 					
 During construction, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less. (Rule 228 / section 401.2) 					
MM 4.5-1 Air Quality Measures	The applicants shall submit	Pre-Construction: Prior to	Director of Public		
Implementation of the Air Quality Mitigation Measures listed in Section 4.3 Air Quality would reduce	construction management plans as	issuance of Grading Permits.	Works shall ensure		

that dust and

measures are

implemented.

construction-control

Add as note on Improvement

Plans and Building Plans

part of the Grading Permit

application. The Public Works

for inclusion of these measures

prior to issuance of grading

permits. The City Code

Director shall review grading plans

operational and construction-related emissions of criteria air pollutants and precursors, and would

Measure 4.4-1 found in the Air Quality section of this EIR, is relevant to impact 4.5-1 because both

criteria air pollutant and GHG emissions are frequently associated with combustion byproducts. In

addition, the City shall implement the following measures to reduce direct and indirect GHG

also act to reduce GHG emissions associated with project construction and operation. Mitigation

emissions associated with the proposed project. Certain measures would already be components of the project (i.e., Specific Plan policies, design guidelines and standards), and/or would be applied consistent with the City's General Plan Policies, addressing GHG emissions and climate change, but are provided here for purposes of completeness.	Enforcement Officer shall respond to complaints. In addition, plans will be reviewed by the Placer County Air Pollution Control District for compliance with their rules and				
MM 4.5-2 Additional Measures to Reduce GHG Emissions	regulations.				
For each new development within the project site requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit), the City shall impose mitigation measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32). The City shall require feasible reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of developments and supporting infrastructure that are part of the proposed project by 30% from business-as-usual emissions levels projected for 2025, if feasible.					
MM 4.14-1 Site Lighting to Minimize Nuisance Light producing uses, such as ball fields, within the SVSP Area shall be located and oriented to minimize visual impacts on adjacent residential areas. Lighting should be shielded and designed to distribute light in the most effective and efficient manner, using the minimum amount of light to achieve the necessary illumination for the use, as defined by suggested lighting standards for competitive play.	Comply with the measure	Pre-Construction: Ensure fixtures shown on Improvement Plans and Building Plans comply with the measure.	Engineering and Building	None	
MM 4.14-2 Use Low Glare Materials					
In order to reduce the effects of daytime glare from development of commercial or office uses within the SVSP Area, building developers should make use, when feasible, of low-glare materials.					
MM 4.14-3 Avoid Light Spill Over into Curry Creek and Open Space Areas					
Outdoor lighting shall be placed, designed and directed so as to avoid light spillover into the habitat of Curry Creek and the Open Space Preserve areas located immediately adjacent to the open space, as shown on the Land Use Map as parcels KT-1, KT-40, KT-30, KT-41, DF-1, DF-2, DF-40, CG-1, CG-82m JM-21, JM-3, and JM-4.					

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 MM 4.6-1 Construction Noise Reduction MM 4.6-1(a): Construction activities shall comply with the requirements of the City of Roseville Noise Ordinance. MM4.6-1(b): Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all in-take and exhaust ports on power construction equipment. MM 4.6-1(c): Designate a construction disturbance coordinator and conspicuously post the Coordinator's contact information around the project site and in adjacent public spaces. The disturbance coordinator will receive all public complaints about construction noise disturbances, and will be responsible for determining the cause of the complaint, and implementing any feasible measures to be taken to alleviate the problem. MM 4.6-1(d): Well drilling shall occur prior to construction of the adjacent subdivision, to the extent feasible. If construction timing for the wells occurs after subdivision construction, then measures to reduce noise shall include; hanging flexible sound control curtains around the drilling apparatus, and the drill rig, to the degree feasible, as determined by the Environmental Utilities Director, if located within 1,000-feet of an occupied residence. 	Discuss during pre-construction meeting and comply with the measure.	Pre-Construction and Construction: During construction for MM 4.6-1(d), and prior to issuance of Improvement Plans and/or Building Permits for all others. Add as note on Improvement Plans and Building Plans	Engineering staff to discuss this measure during preconstruction meeting and ensure posting has occurred. Environmental Utilities to address well drilling.	None	
MM 4.6-2 Commercial Noise Controls For all commercial uses within 150 feet of residential uses, the developer shall implement the following or equally effective measures: In general, where commercial land uses adjoin residential property lines, the following measures should be included in the design of the commercial use. If the primary noise sources are parking lot noise, HVAC equipment and light truck deliveries, then 6-7 foot tall masonry walls shall be constructed to provide adequate isolation of parking lot and delivery truck activities. HVAC equipment shall be located either at ground level, or when located on roof-tops the building facades shall include parapets for shielding.	The Planning Department shall review development proposals to ensure that the uses are compatible	Prior to issuance of Building Permits	The Planning Director shall review all commercial plans and ensure that appropriate measures are implemented.		

MM 4.8-3 **Avoid Nesting Sites** Results of preconstruction surveys Pre-Construction and Engineering Nesting bird surveys shall be submitted prior to the Construction: Surveys required To ensure that fully protected bird and raptor species are not injured or disturbed by construction in issuance of a grading permit or prior to construction. If the vicinity of nesting habitat, the project applicant shall implement the following measures: Improvement Plans. Applicable surveys are positive for birds, Raptors construction restrictions shall be then remainder of mitigation a) When feasible, all tree removal shall occur between August 30th and February 15th to avoid the steps are required prior to reflected within plans. The breeding season of any raptor species that could be using the area, and to discourage hawks from applicants shall prepare annual construction. nesting in the vicinity of an upcoming construction area. reports on the status and success of mitigation and shall submit these b) For Swainson's hawk, if avoidance of tree removal outside the breeding season is not feasible, Add as note on Improvement reports to USFWS and CDFG. The and a nest is present, the applicants would be required to obtain a 2081 permit from CDFG to Plans. applicants shall coordinate with mitigate for potential "take" under CESA. If no nesting is occurring, a take permit would not be USFWS and CDFG to modify as required. necessary any mitigation plans in c) Prior to the beginning of mass grading, including grading for major infrastructure improvements, an effort to attain mitigation during the period between February 15th and August 30th, all trees and potential burrowing owl success. habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30-days prior to disturbance. If active raptor nests or burrows are found, and the site is within 350-feet of potential construction activity, a highly visible temporary fence shall be erected around the tree or burrow(s) at a distance of up to 350-feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. d) Preconstruction and non-breeding season exclusion measures shall be developed in consultation with CDFG, and shall preclude burrowing owl occupation of the portions of the project site subject to disturbance such as grading. Burrowing owls may be passively excluded from burrows in construction areas by placing one-way doors in the burrows according to CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls regardless of whether they exhibit signs of occupation must be cleared with the one way doors. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. e) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones) unless directly related to the management or protection of the legally protected species. f) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist. Black Rails and Tri-colored Blackbirds Prior to earth moving that would disturb marsh habitat, a qualified biologist shall conduct surveys to determine the presence of the California black rail. If either of these species is found, all earth moving within 250 feet shall stop and measures, including establishing nest protection buffers along both sides of Curry Creek during the nesting season (generally February 1 through August 31st) shall be implemented. Rookeries No heron rookeries are present within the plan area. Prior to earthmoving that would disturb marsh habitat or tree removal of the eucalyptus grove, pre-construction surveys should be conducted to verify that no rookeries have been established. If rookeries are present all earth moving within 250-feet shall stop, during the breeding season. MM 4.13-1 Implementation of construction activity stormwater protection standards The developer shall create a Pre-Construction and **SWPPP** Engineering SWPPP, submit it to the City, and Construction: Submit SWPPP Prior to the issuance of a City grading permit and the commencement of construction activities, comply with its provisions. and ensure that BMPs remain compliance with the State's General Construction permit, the City of Roseville's Construction Standards. in place during construction. and the City's Stormwater BMP Guidance Manual will be met. This includes the creation of a Storm Water Pollution Prevention Plan (SWPPP) that will identify the site, the location of sensitive habitats or Add as note on Improvement watercourses, drainage areas, discharge locations, soil disturbance areas, and the locations of all runoff, Plans and Building Plans. erosion control, and sediment control Best Management Practices (BMPs). On-going monitoring and

adjustments to the SWPPP will occur when needed to address changes in the field as construction

activities evolve.

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MM 4.9-1 Cease Work and Consult with Qualified Archaeologist Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100-feet of the find. The City of Roseville Planning and Public Works Staff shall be immediately notified. At that time, the City of Roseville shall coordinate any necessary investigation of the site with qualified archaeologists as needed, to assess the resource (i.e., whether it is an "historical resource" or a "unique archaeological resource") and provide proper management recommendations should potential impacts to the resources be found to be significant. Possible management recommendations for important resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, data recovery excavations. The contractor shall implement any measures deemed feasible and necessary by City staff, in consultation with the archaeologists, to be to avoid or minimize significant effects to the cultural resources. In addition, pursuant to Section 5097.98 or the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	Construction: Measure applies if resources are discovered during construction. Add as note on Improvement Plans and Building Plans.	Engineering and Building	None	
Mitigation Measure 4.9-2 Cease Work and Consult with Qualified Paleontologist Should any evidence of paleontological resources (e.g. fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance, if feasible in light of project design or layout, or data recovery excavations. The contractor shall implement any measures deemed feasible and necessary by City staff in consultation with the paleontologist for the protection of the paleontological resources.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	Construction: Measure applies if resources are discovered during construction. Add as note on Improvement Plans and Building Plans.	Engineering and Building	None	
Mitigation Measure 4.9-3 Conduct Studies Prior To Offsite Infrastructure Construction Prior to undertaking construction of off-site infrastructure, the City shall determine whether or not cultural resource surveys have been undertaken for any areas to be disturbed during construction. If surveys were conducted, the City shall document that any identified resources were treated as recommended in the studies. If no studies or surveys were conducted, the City shall ensure that a qualified archaeologist conducts the appropriate level of study. If resources are found, recommendations, including the possible management recommendations listed in MM 4.9-1 and MM4.9-2, shall be implemented to ensure that the resources are avoided, protected and/or recorded, as determined to be feasible and appropriate by City staff.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	Pre-Construction: Prior to issuance of Grading Permits or Improvement Plans. Add as note on Improvement Plans.	Engineering and Building	Applicable studies	
MM 4.10-1 Identify Potential Hazardous Materials (soil contamination, tank or well sites, lead based paint and/or asbestos) Prior to site development in the SVSP, recommended testing and remediation, if needed shall occur. Groundwater wells shall be properly closed. If evidence of soil contamination, septic tanks, or other underground storage tanks are encountered in previously unidentified locations in the SVSP area, work shall cease until the area can be tested, and if necessary remediated and/or properly removed or closed. Remediation activities could include removal of contaminated soil, and/or onsite treatment. As part of the process, the City shall ensure that any necessary investigation and/or remediation activities are coordinated with the Roseville Fire Department, Placer County Division of Environmental Health, and if needed, other appropriate federal, state and local agencies. Once a site is remediated, construction can continue.	The applicants shall be responsible for conducting soil testing and/or recommendation of the Phase I environmental site assessments, if conditions are encountered which warrant such studies.	Construction: Applies if conditions found which warrant assessment (e.g. stained soils, underground tanks). Add as note on Improvement Plans.	Engineering and Fire	Phase I environmental assessment, if conditions warrant	
MM 4.12.4-2 Divert Construction Debris The applicants shall ensure a 50% reduction in the construction waste stream generated from development within the SVSP. In Developer contracts with construction contractors and their subcontractors, the Developer shall require that construction waste be reduced by 50%. The Developer shall further require that contractors and sub-contractors submit records of diversion and disposal to the City's Environmental Utilities Department in order to verify compliance with this requirement.	Comply with the measure	Construction: Contractor to ensure diversion occurs during construction. Add as note on Improvement Plans and Building Plans.	Environmental Utilities	Records of diversion	

the City's Environmental Utilities Department in order to verify compliance with this requirement.

NOTE: This table is provided as a courtesy to the developer, to highlight the text of measures which are required to be placed on Improvement Plans and/or Building Plans. Refer to the applicable environmental document (e.g. Environmental Impact Report) for a full list of measures, and for context. Other measures may be applicable, but are not included here because they have already been completed or they are addressed via other mechanisms (e.g. development fees).