

Northeast Antioch Area Reorganization

MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation	Responsible Agency	Timing
Air Quality					
The project has the potential to violate air quality standards, contribute substantially to projected air quality violations, or result in a cumulatively considerable net increase of any criteria pollutant.	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure AQ-1: During demolition or any construction ground disturbance, implement measures to control dust and exhaust. The contractor shall implement the following Best Management Practices, which are recommended by BAAQMD and are required of all projects:</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 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. 7. All construction equipment and haul trucks shall be maintained and properly tuned in accordance with manufacturer's specifications. 	Less-than-significant	City of Antioch	During construction

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		<p>All construction equipment and haul trucks shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.¹</p> <p>8. A publicly visible sign shall be posted with the telephone number of the Construction Manager and BAAQMD to report dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD complaint line telephone number shall also be visible to ensure compliance with applicable regulations.</p> <p>9. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</p> <p>10. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph on an hourly average. The average wind speed determination shall be on a 15 minute average, taken over 4 consecutive 15-minute periods at the nearest meteorological station or by wind instrument on site.</p> <p>11. Minimizing the idling time of diesel powered construction equipment to two minutes.</p> <p>12. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after treatment products, add-on devices such as particulate filters, and/or other options as such become available.</p>			

¹ While some of these measures do not pertain strictly to fugitive dust, they are nonetheless included in the *BAAQMD CEQA Guidelines* (page 8-4) list of BMPs related to construction.

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		<p>13. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_x and PM.</p> <p>14. Requiring that all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.</p>			

Biological Resources					
<p>The project would have potentially significant impacts to the following animal species because of physical observation or the presence of suitable habitat:</p> <ul style="list-style-type: none"> Lange's Metalmark Butterfly (<i>Apodemia mormo-langei</i>) Silvery Legless Lizard (<i>Anniella pulchra pulchra</i>) Western Burrowing Owl (<i>Athene cunicularia</i>) Swainson's Hawk (<i>Buteo swainsoni</i>) 	<p>Potentially Significant Unless Mitigation Incorporated</p>	<p>Mitigation Measure BIO-1: Western Burrowing Owl</p> <p>Prior to the start of the breeding season (February 1), a USFWS/CDFG-approved biologist will conduct preconstruction surveys of the project area to determine the presence of burrowing owls. If present, the birds will be evicted from the site using passive relocation techniques. The site will then be continuously monitored until the start of construction in order to ensure that owls do not reoccupy the area. All surveys and passive relocation will be carried out in accordance with CDFG survey guidelines (California Department of Fish and Game 1993). Passive relocation procedures include installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows will be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure will be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.</p>	<p>Less-than-significant</p>	<p>City of Antioch</p>	<p>Pre-construction, during construction</p>

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<ul style="list-style-type: none"> Cooper's Hawk (<i>Accipiter cooperii</i>) Red-Tailed Hawk (<i>Buteo jamaicensis</i>) White-Tailed Kite (<i>Elanus leucurus</i>) 					
	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure BIO-2: Swainson's Hawk</p> <p>The Swainson's hawk is a State listed threatened migratory bird known to have nested approximately one (1) mile south of the area. Some of the larger trees along the proposed pipeline routes are of suitable-size for nesting for the species.</p> <p>During the nesting season (March 1-September 15), a qualified biologist shall conduct a preconstruction survey no more than 14 days prior to ground disturbance, to establish whether Swainson's hawk nests within 0.25-mile of the project area are occupied. If potentially occupied nests exist within 0.25 mile of the project area, then their occupancy will be determined by observation from public roads or by observations of Swainson's hawk activity (e.g., foraging) near the project area. If active Swainson's hawk nests are identified during these pre-construction surveys, no construction activities shall occur during the nesting season within 0.25-mile of occupied nests or nests under construction, unless CDFG/USFWS agree to a smaller buffer based on environmental conditions such as steep topography or dense vegetation. If the biologist determines that the young have fledged prior to September 15, construction activities can proceed normally.</p>	Less-than-significant	City of Antioch	Pre-construction, during construction

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	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure BIO-3: Other Protected Raptors (Cooper's Hawk, Red-Tailed Hawk, and White-Tailed Kite)</p> <p>If project construction is scheduled to begin during the breeding season (February 1- August 31), preconstruction tree surveys will be conducted within the project area and a 300-foot buffer, by a qualified biologist no more than two weeks prior to equipment or material staging, or surface-disturbing activities. If no active nests are found within the project footprint and a 300-foot buffer, no further mitigation is necessary.</p> <p>If active nests (i.e. nests in the egg laying, incubating, nestling or fledgling stages) are found within 300 feet of the project footprint, non-disturbance buffers should be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the nesting pair's tolerance to disturbance and duration of potential disturbance. No work should occur within the non-disturbance buffers until the young have fledged as determined by a qualified biologist, Buffer size should be determined in cooperation with the California Department of Fish and Game and the U. S. Fish and Wildlife Service. If buffers are established and it is determined that project activities are resulting in nest disturbance, work should cease immediately and the California Department of Fish and Game and the U.S. Fish and Wildlife Service should be contacted for further guidance.</p>	Less-than-significant	City of Antioch	Pre-construction, during construction
The project may conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure BIO-4: Regulated Trees</p> <p>After staking of the utility alignment if any existing trees are located within that alignment then an International Association of Arboriculture (ISA) Certified Arborist shall conduct a tree survey to determine which, if any of the trees to be removed are subject to the City tree ordinance. If regulated trees are found they will be marked with round numbered aluminum tags and tallied as to their species, diameter at breast height (DBH) and condition.</p>	Less-than-significant	City of Antioch	Pre-construction, during construction

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Cultural Resources					
The project could potentially cause a substantial adverse change in the significance of a historical resource or of an archaeological resource, as defined in Section 15064.5	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure CUL-1: Previously Recorded Archaeological Resources:</p> <p>As discussed, there is a known archaeological resource within the project area. The resource has not been formally evaluated for its potential eligibility to the CRHR. At this time it is understood that the project can avoid this resource. A qualified archaeologist will mark off a buffer area to avoid potential impact to this resource from project-related construction activities. The resource shall be located and flagged prior to the beginning of work so that it may be avoided during extension of utility infrastructure in this area.</p> <p>In the event that ground-disturbing activities must be conducted within this area, prior to any such activities, the City shall conduct a formal site evaluation to assess whether the resource is potentially eligible for listing in the CRHR. If the resource is found eligible and cannot be avoided, project impacts shall be mitigated in accordance with the recommendations of the Principal Investigator and CEQA Guidelines Section 15126.4 (b)(3)(C) which require development and implementation of a data recovery plan that would include recommendations for the treatment of materials comprising the resource.</p>	Less-than-significant	City of Antioch	Pre-construction
	Potentially Significant unless Mitigation Incorporated	<p>Mitigation Measure CUL-2: Monitoring of High Sensitivity Areas:</p> <p>Portions of the proposed infrastructure extension would take place in areas deemed to have moderate to high potential for as yet discovered archaeological resources. If present, prehistoric archaeological deposits may extend below the level that was disturbed as part of earlier road building.</p> <p>Given the sensitivity of this area for potential resources and based on the consultation with affected Native American tribal representatives, all project-related excavation along Trembath Lane</p>	Less-than-significant	City of Antioch	During construction

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		<p>between East 18th Street and Mike Yorba Way shall be conducted in the presence of a qualified archaeological monitor. A Bay Area Miwok Native American monitor shall also be present when an archaeological monitor is present.</p> <p>Whether or not significant archaeological resources are encountered during archaeological monitoring, the archaeological monitor shall submit a written report of the results of the monitoring program to the City of Antioch</p>			
	Potentially Significant unless Mitigation Incorporated	<p>Mitigation Measure CUL-3: Procedure for Addressing Previously Undiscovered Archaeological Resources:</p> <p>If an intact archaeological deposit is encountered during excavation, all soil disturbing activities in the vicinity of the deposit shall cease immediately. The archaeological monitor shall be empowered to temporarily redirect excavation activities and equipment until such time that the resource can be evaluated for its eligibility to the CRHR by a qualified archaeologist and appropriate action taken as determined necessary by the lead agency. If the resource is recommended to be non-significant, avoidance is not necessary. If the resource is recommended as potentially significant or eligible to the CRHR, it will be avoided. If avoidance is not feasible, project impacts will be mitigated in accordance with the recommendations of the Principal Investigator and CEQA Guidelines §15126.4 (b)(3)(C), which require development and implementation of a data recovery plan that would include recommendations for the treatment of the discovered archaeological materials. The data recovery plan would be submitted to the City of Antioch for review and approval. Upon approval and completion of the data recovery program, project construction activity within the area of the find may resume, and the archaeologist will prepare a report documenting the methods and findings. The report will be submitted to the City of Antioch. Once the report is reviewed and approved by the City of Antioch, a copy of the report will be submitted to the NWIC.</p>	Less-than-significant	City of Antioch	Pre-construction

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The project could potentially directly or indirectly destroy a unique paleontological resource, site, or unique geologic features.	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure CUL-4:</p> <p>In the event that paleontological resources are encountered during any phase of project construction, all soil-disturbing activity within 100 feet of the find shall be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations. The City shall incorporate all feasible recommendations into the project.</p>	Less-than-significant	City of Antioch	During construction
The project could potentially disturb human remains, including those interred outside of formal cemeteries.	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure CUL-5:</p> <p>California Health and Safety Code Section 7050.5(b) states in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of</p> <p>Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Public Resources Code Section 5097.98.</p>	Less-than-significant	City of Antioch	During construction

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Hazards & Hazardous Materials					
<p>The project could potentially create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</p>	<p>Potentially Significant Unless Mitigation Incorporated</p>	<p>Mitigation Measure HAZ-1:</p> <p>Prior to the issuance of a grading permit and before any substantial ground disturbances, a Phase II ESA shall be conducted by a licensed professional to determine the potential presence of metals, and organic compounds in soil and groundwater underlying the project site. If contaminants are identified in subsurface soils and/or groundwater, the Phase II ESA shall screen the identified contaminant concentrations relative to applicable environmental screening levels developed by the Regional Water Quality Control Board and the Department of Toxic Substances Control for residential use and construction worker health and safety. If contaminant concentrations are above the applicable screening levels, the Phase II report shall make recommendations for remedial actions for the protection of public health and the environment. If the Phase II ESA recommends remedial action (which may include but not be limited to soil and/or groundwater removal or treatment, site-specific soil and groundwater management plan, site-specific health and safety plan, and a risk management plan), the project sponsor shall consult with the appropriate local, state, or federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and the environmental, both during and after construction, posed by soil contamination and/or groundwater contamination. The project sponsor shall obtain and submit written approval documentation for any remedial action, if required by a local, state, or federal environmental regulatory agency prior to project occupancy.</p>	<p>Less-than-significant</p>	<p>City of Antioch</p>	<p>Pre-construction</p>

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Noise					
The project has the potential to create impacts related to temporary and permanent noise levels, ground borne noise levels and ground borne vibration levels.	Potentially Significant Unless Mitigation Incorporated	<p>Mitigation Measure NOISE-1:</p> <p>Prior to the issuance of grading or building permits, as well as on-going through project construction, the City shall ensure that construction teams adhere to the following construction noise control measures:</p> <ul style="list-style-type: none"> • Restrict noise-generating activities at the construction site or in areas adjacent to the construction site between the hours of 7:00 AM to 7:00 PM daily (except Saturday, Sunday and holidays when work is prohibited prior to 9:00 AM and after 7:00 PM). • Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Unnecessary idling of internal combustion engines is strictly prohibited. • Utilize "quiet" air compressors and other stationary noise sources where technology exists. • Control noise from construction workers' radios to a point that they are not audible at existing residences. 	Less-than-significant	City of Antioch	During construction