

6. Mitigation and Monitoring Reporting Program

Where a CEQA document has identified significant environmental effects, Public Resources Code Section 21081.6 requires adoption of a “reporting or monitoring program for the changes to the project which it has adopted or made a condition of a project approval to mitigate or avoid significant effects on the environment.”

A public agency is required to ensure that the measures are fully enforceable, through permit conditions, agreements, or other means (Public Resources Code Section 21081.6(b)). A Mitigation Monitoring and Reporting Program (MMRP) must be designed to ensure project compliance with mitigation measures during project implementation. The County of San Mateo is the lead agency that must adopt an MMRP for development of the project.

This MMRP has been prepared to provide for the monitoring of mitigation measures required of the proposed project, as set forth in the Final IS/MND.

6.1 Format

Table 6-1 of this MMRP lists each of the mitigation measures identified in Section 4 of the Draft IS/MND, along with information about the entity responsible for implementing each measure, timing requirements, and implementation procedures. Key features of the MMRP are briefly described below

- **Implementation Responsibility** identifies the person/group responsible for implementation of the mitigation measure.
- **Mitigation Responsibility** assigns the responsibility for each mitigation measure and reporting tasks.
- **Monitoring and Reporting Action** identifies the outcome from implementation of mitigation measures.
- **Mitigation Schedule** provides the general schedule for conducting each mitigation task.
- **Verification of Compliance** documents the person who verified implementation of the mitigation measure and the date on which this verification occurred.

6.2 Roles and Responsibilities

The County of San Mateo will oversee monitoring and documenting the implementation of mitigation measures. The County and its construction contractors is responsible for fully understanding and effectively implementing all of the mitigation measures contained within this MMRP. Certain mitigation measures also will require that the County coordinate or consult with one or more other public agencies in implementing mitigation measures specified herein.

Table 6-1. Middlefield Road Improvement Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Implementation Responsibility	Monitoring Responsibility	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
<p>Mitigation Measure AQ-1: Implement BAAQMD Basic Construction Mitigation Measures. The County shall include the following measures in contractor specifications for the Project, and such measures, if applicable and as directed by the County's Engineer, shall be implemented during all phases of construction:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered 2 times per day. • All haul trucks transporting soil, sand, or other loose material shall be covered. • 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. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads will be laid as soon as possible after grading, unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified visible emissions evaluator. • A publicly visible sign shall be posted at the Project construction site(s) with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number also shall be visibly posted, for compliance with applicable regulations. 	County Construction Contractor(s)	County	Review and approve construction plans, bid documents, and specifications for inclusion of BAAQMD Basic Construction mitigation measures as specified in this measure.	Prior to and during construction	
<p>Mitigation Measure BIO-1: Nesting Birds Project construction activities, particularly any tree trimming or removal (if necessary), shall be timed to avoid the bird nesting season (February 1st through August 31st) when possible. If construction activities are scheduled during the nesting</p>	County Construction Contractor(s)	County	Monitor project schedule and contractor compliance.	Prior to and during construction	

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<p>season, and if any tree trimming or removal is necessary, a qualified biologist shall conduct a preconstruction survey at least two weeks prior to commencement of construction activities to identify any potential nesting activity. If the survey indicates the presence of nesting birds, protective buffer zones shall be established around the nests. The size of the buffer zone shall be recommended by the biologist in <i>consultation</i> with the CDFW depending on the species of nesting bird and level of potential disturbance. The buffer zones shall remain in place until the young have fledged and are foraging independently. A qualified biologist shall monitor the nests closely until it is determined the nests are no longer active, at which time construction activities may commence within the buffer area.</p>	<p>Qualified biologist retained by the County (if necessary)</p>		<p>If construction activities scheduled during nesting season, and if any trimming or removal is necessary, verify pre-construction surveys are completed and recommended buffers maintained during construction.</p>		
<p>Mitigation Measure CUL-1: Treatment of Unanticipated Archaeological Discoveries: If unanticipated prehistoric or historic-period archaeological resources are encountered during construction, work shall be temporarily halted in the vicinity of the discovered materials and workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated, recorded and determined appropriate treatment of the resource, in consultation with the County. Project personnel shall not collect cultural resources. Cultural resources shall be recorded on California Department of Parks and Recreation (DPR) 523 historic resource recordation forms. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies. If it is determined that the proposed development could damage a unique archaeological resource, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. This measure would reduce the potential impact on archaeological resources to a less-than-significant level.</p>	<p>County Construction Contractor(s)</p>	<p>County</p>	<p>Monitor contractor compliance</p>	<p>During construction</p>	

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<p>Mitigation Measure CUL-2: Treatment of Human Remains: If human remains of Native American origin are discovered during construction of the Project, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (NAHC) (Public Resources Code Section 5097). If any human remains are discovered in any location in the Project area, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</p> <ul style="list-style-type: none"> The San Mateo County coroner has been informed and has determined that no investigation of the cause of death is required; and If the remains are of Native American origin: <ul style="list-style-type: none"> The descendants of the deceased Native Americans have made a recommendation regarding the disposition of remains and any associated grave goods, as provided in Public Resources Code Section 5097.98; or The NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified. 	County Construction Contractor(s)	County	Monitor contractor compliance	During construction	
<p>Mitigation Measure HAZ-1: Environmental Site Investigation. Prior to any substantial ground disturbance within the areas specified below, the County or their Construction Contractor(s) shall hire a qualified environmental professional to conduct a Phase II environmental site investigation (ESI) to determine the potential presence of metals and organic compounds in soil and groundwater within the railroad ROW or within 100 feet of the following properties:</p> <ul style="list-style-type: none"> 2655 Middlefield Road (Geotracker Case T0608100544: Tilton Properties) 2682 Middlefield Road (Geotracker Case T0608100066: Beals and Martin Associates) 3157 Middlefield Road (Geotracker Case T0608100218: Figueras Property) 3233 Middlefield Road (Geotracker Case T0608152727: Zohrab's Garage) <p>The Phase II ESI shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the</p>	County Construction Contractor(s) Qualified environmental professional	County	Verify a Phase II ESI has been prepared and recommendations implemented. If site-specific soil and groundwater management plan is required, verify that it is prepared and implemented, and provide appropriate closure documentation or written statement from the relevant oversight	Prior to any ground disturbance within the railroad ROW or within 100 feet of the specified properties	

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<p>Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II ESI identifies contaminant concentrations above the screening levels, a site-specific soil and groundwater management plan shall be prepared and implemented. The County shall consult with the RWQCB, DTSC, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed. The site-specific soil and groundwater management plan shall be formulated with the objective of handling and disposing of excavated soil, groundwater, and/or dewatering effluent in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements, and at a minimum, shall include the following:</p> <ul style="list-style-type: none"> • Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel; • Procedures for handling, excavating, characterizing and managing excavated soils and dewatering effluent including potential procedures for managing and disposing of hazardous waste; • Procedures for notification and reporting, including internal management and local agencies, as needed; • Minimum requirements for site-specific health and safety plans, to protect the general public and workers in the construction area (note: these requirements and the environmental sampling results shall be provided to contractors who shall be responsible for developing their own construction worker health and safety plans and training requirements). 			<p>agency(ies) that remediation work has been satisfactorily completed and without further conditions or obligations.</p>		
<p>Mitigation Measure HAZ-2: Contractor Specifications. The County shall include the following measures in its contractor specifications, and such measures shall be implemented by the contractor(s) during construction:</p> <ul style="list-style-type: none"> • During all ground-disturbing activities throughout the Project area, the Contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Should signs of unanticipated contamination be encountered, work will be suspended, San Mateo County Department of Environmental Health (SMCDEH) will be notified, and the area secured. An investigation shall be designed and performed to verify the presence and extent of contamination at the site, and a site- 	<p>County Construction Contractor(s)</p>	<p>County</p>	<p>Review and approve construction plans, bid documents, and specifications for inclusion of measures as specified in this measure.</p>	<p>Prior to and during construction</p>	

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<p>specific soil and groundwater management plan, as described under Mitigation Measure HAZ-1 above, shall be prepared and implemented.</p> <ul style="list-style-type: none"> Prior to commencement of construction activities, the Contractor shall prepare and implement a site-specific health and safety plan (HASP), in accordance with State and federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.120). Copies of the HASP shall be made available to construction workers for review during their orientation and/or regular health and safety meetings, and a copy provided to the County Department of Public Works (DPW). The HASP shall be amended, as necessary, if new information becomes available that could affect implementation of the plan. 					
<p>Mitigation Measure NOI-1: Limitations on Construction Activities Generating Excessive Vibration. The County shall include the following measures in its contractor specifications, and such measures shall be implemented by the Contractor(s) during construction:</p> <p>a) Operation of construction equipment shall be prohibited within the following specified distances of adjacent building facades, per the following categories, unless the precautions in subsection (b) below are implemented:</p> <ul style="list-style-type: none"> 15 feet for large bulldozers (and comparable large mobile equipment/vehicles having a reference PPV of 0.089 inches per second at 25 feet, per FTA guidance); 8 feet for jackhammers (and comparable portable vibratory equipment having a reference PPV of 0.035 inches per second at 25 feet, per FTA guidance); and D feet for any other vibratory equipment having a reference PPV of X inches per second vibration velocity at 25 feet, that satisfies the following expression: $0.2 \text{ inches per second} = X * (25/D)^{1.5}$. <p>b) If the restrictions within subsection (a) above cannot be achieved, the contractor implement the following measures:</p> <ul style="list-style-type: none"> Pre-construction inspections of the facades of adjacent buildings within the specified distances to document pre-construction conditions. Daily inspections of the facades of adjacent buildings during use of heavy or vibratory equipment within the specified distances, to document any construction-related vibration damage. 	<p>County Construction Contractor(s)</p>	<p>County</p>	<p>Review and approve construction plans, bid documents, and specifications for inclusion of vibration reduction measures as specified in this measure.</p>	<p>Prior to and during construction</p>	

Mitigation Measures	Implementation Responsibility	Monitoring Responsibility	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
<ul style="list-style-type: none"> If any construction-related damage is observed, the Contractor shall be responsible for repairing any construction-related vibratory damage to building facades to pre-construction conditions. 					
<p>Mitigation Measure NOI-2: Limitations on Construction Activities Generating Excessive Noise. The County shall include the following measures in its contractor specifications, and such measures shall be implemented by the contractor(s) during construction:</p>	County Construction Contractor(s)	County	Review and approve construction plans, bid documents, and specifications for inclusion of noise reduction measures as specified in this measure.	Prior to and during construction	
<ul style="list-style-type: none"> Per San Mateo County's Municipal Code, construction activities shall be limited to the hours of 7 a.m. to 6 p.m. on weekdays, 9:00 am to 5:00 pm on Saturdays. Construction activities are prohibited at any time on Sundays, Thanksgiving, and Christmas. Provide written notification of construction activities and schedule to all noise-sensitive receptors (e.g., residential properties, hospitals, and schools) adjacent to the Project area. The notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the Project representative to be contacted in the event that noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification. Prohibit unnecessary idling of internal combustion engines. Equip all equipment driven by internal combustion engines with mufflers which are in good mechanical condition, appropriate for the equipment, and no less effective than those originally installed by the manufacturer. Utilize "quiet" air compressors and other stationary noise sources where practical and feasible. Use electrically powered equipment instead of internal combustion equipment where practicable and feasible. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors and place equipment so that emitted noise is directed away from nearby sensitive receptors. Construct temporary noise barriers, where feasible and as directed by the County Engineer, to screen stationary noise-generating equipment when located within 200 feet of adjoining sensitive land uses. Temporary noise barrier fences would provide a 5-15 dBA noise reduction if the noise barrier interrupts the line-of-sight between the 					

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<p>noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.</p> <ul style="list-style-type: none"> Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the Project area. Equip concrete saws (or similar portable/mobile equipment) with modern noise-reducing blades; and install sound-absorptive and sound-blocking shrouds or temporary barriers (e.g., curtains or blankets suspended from portable field-erected framing systems, such as EchoBarrier or comparable commercially-available products and assemblies) that can be readily moved—and thus stay in proximity to the concrete saw—as work progresses to different locations on the Project area. Designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures as warranted to correct the problem. 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. 					
<p>Mitigation Measure TRA-1: Traffic Control Plan. The Construction Contractor shall be responsible for preparing and implementing a Traffic Control Plan (TCP) approved by the County, prior to the start of construction. The TCP shall include traffic control measures to ensure the safety of all roadway users (including motorists, transit riders, bicyclists, and pedestrians) and minimize disruptions to traffic, transit, bicycle, and pedestrian circulation during the construction period.</p> <p>Towards the above goals, the TCP shall include, but not be limited to, the following provisions:</p> <ul style="list-style-type: none"> Identification of required temporary traffic control devices (as determined necessary by the County), including signage, delineators, flashing arrows, and/or temporary pavement markings (e.g., lane striping). Advance notification (signage) to notify all roadway users of major construction activities (e.g., lane closures, bus stop relocations) and other associated information (e.g., recommended detour routes). 	County Construction Contractor(s)	County	Review and approve a Traffic Control Plan, with contents specified in this measure.	Prior to and during construction	

Mitigation Measures	Implementation Responsibility	Monitoring Responsibility	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
<ul style="list-style-type: none"> • Coordination with transit service providers (i.e., SamTrans) to identify potential effects to transit access or operations and potential solutions to address these issues (e.g., relocation of bus stops). • Coordination with County and local emergency service providers (e.g., police, fire, and medical) to minimize effects on response times through the Project area (e.g., identification of detour routes) and maintenance of emergency vehicle access for properties adjacent to or in the vicinity of the Project area at all times. • Identification of locations for contractor parking (e.g., existing on- and/or off-street facilities, staging areas within the Middlefield Road ROW, etc.), if necessary, to minimize the loss of on-street parking capacity within the Project area during construction. • Identification of construction equipment/material delivery procedures and staging areas. • Restrictions on construction truck traffic to and from the site during the weekday AM and PM peak periods, when feasible. • Deployment of flaggers and appropriate signage to ensure the safety of all roadway users during lane closures. • Notification to adjacent property owners and public safety personnel regarding schedules for major deliveries, recommended detour routes, and other construction effects (e.g., lane/sidewalk closures). • Identification of designated routes for construction trucks traveling to/from the site and monitoring of pavement quality along these routes so that damage and debris attributable to construction trucks can be identified and corrected by the Construction Contractor. • Procedures for granting access to delivery trucks and service vehicles to businesses within the active construction segment during construction hours, including signage, barricades, use of flaggers; and for maintaining access after hours and/or during weekends when construction personnel are not present. • Maintenance of dedicated pedestrian walkways to all businesses throughout the construction period, with appropriate signage and notification to affected businesses. 	County	County	Confirm that improvements have been included within	Prior to approval of final project design	
<p>Mitigation Measure TRA-2: Middlefield Road/Fifth Avenue Intersection Improvements. To mitigate the Project's LOS impacts at the Middlefield Road/Fifth Avenue intersection, the County Department of Public Works shall fund and implement the following improvements such</p>					

Mitigation Measures	Implementation Responsibility	Monitoring Responsibility	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
<p>that the increase in average peak-hour delay over 2020 No Build conditions would be less than 4 seconds:</p>			<p>final design drawings.</p>		
<ol style="list-style-type: none"> 1) Re-stripe the eastbound and westbound approaches of Fifth Avenue to include a left-turn pocket and a shared through/right-turn lane; and 2) Modify signal timing. 					
<p>Mitigation Measure TRA-3: Monitoring and Improvements at Middlefield Road/Berkshire Avenue, Middlefield Road/First Avenue, Middlefield Road/Sixth Avenue, Middlefield Road/Seventh Avenue, and El Camino Real/Fifth Avenue. The County Department of Public Works shall monitor traffic delay at the five intersections listed above to determine when a significant impact would be triggered. Monitoring shall be performed every five years, starting in 2021 or one year following completion of Project construction (whichever is later), and a monitoring report shall be prepared for the County Department of Public Works. The monitoring reports shall include, but not be limited to, a narrative of the site conditions, the method of determining average traffic delay, the results of the monitoring program, and a comparison to 2050 No Build conditions as described in the traffic study. If monitoring at any of these intersections shows that the traffic delays would exceed the 2050 No Build Conditions by more than 4 seconds, the County Department of Public Works would fund and implement actions or improvements to decrease the average delay at those intersections to no more than 4 seconds above the delay under 2050 No Build conditions.</p>	<p>County</p>	<p>County</p>	<p>Implementation of intersection delay monitoring & preparation of monitoring report;</p> <p>Review of monitoring report;</p> <p>Fund and implement suggested improvements and/or fund and implement analysis of alternative improvements to achieve required reduction in delay.</p>	<p>Every five years, starting in 2021 or one year following completion of Project construction (whichever is later);</p> <p>If and when monitoring indicates that intersection delay would exceed the 2050 No Build Conditions by more than 4 seconds.</p>	
<p>The following suggested improvement actions have been identified for each intersection, and have been assessed as being sufficient to mitigate Project impacts to less-than-significant levels:</p>					
<ul style="list-style-type: none"> • Middlefield Road/Berkshire Avenue: Installation of a traffic signal. • Middlefield Road/First Avenue: Installation of a traffic signal. • Middlefield Road/Sixth Avenue: Installation of a traffic signal. • Middlefield Road/Seventh Avenue: Modification of the eastbound approach (driveway) to right-turn-only egress (i.e., prohibition of left-turn and through movements out of the driveway). • El Camino Real/Fifth Avenue: Addition of a second westbound left-turn pocket, and modification of signal timing to separate pedestrian crossing and left-turn phases. 					

Mitigation Measures**Implementation
Responsibility****Monitoring
Responsibility****Monitoring and
Reporting Action****Monitoring
Schedule****Verification of
Compliance**

With the installation of each traffic signal (or combination of traffic signals), the County Department of Public Works shall re-evaluate traffic operations at nearby upstream and downstream intersections within the corridor, consistent with standard traffic engineering practice. This exercise would determine appropriate signal timing offsets or other specific design considerations, if warranted, to address any secondary impacts to traffic circulation.

However, it is possible that at such future time when improvements are required to be implemented, the County Department of Public Works may seek to implement alternative improvement actions to mitigate the impacts. If so, the County Department of Public Works shall analyze the alternative improvements prior to implementation to document that they would achieve the same performance standard as the suggested improvements by reducing the average delay to no more than 4 seconds above the delay under 2050 No Build conditions.