

# Chapter 5 Mitigation Monitoring and Reporting Program

## GOLD LINE EASTSIDE TRANSIT CORRIDOR PHASE 2



Prepared for  
Los Angeles Metropolitan  
Transportation Authority  
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Los Angeles, CA 90012

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## 5. Mitigation Monitoring and Reporting Program

### 5.1 Introduction

Section 21081.6 of the California Public Resources Code requires that, upon certification of an EIR, a lead agency must adopt a “reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” As stated in Section 21081.6, the reporting or monitoring program must be designed to ensure compliance during project implementation. Section 15097 of the CEQA Guidelines provides additional direction on mitigation monitoring or reporting and identifies that a public agency may delegate reporting or monitoring responsibilities to another public agency or private entity, but the lead agency remains responsible for ensuring that implementation of the mitigation measure occurs. As lead agency for the Project, Metro is responsible for administering and implementing the Mitigation Monitoring and Reporting Program (MMRP).

### 5.2 Purpose

The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Final EIR are implemented effectively reducing or avoiding significant adverse environmental impacts resulting from Project implementation. The MMRP for the Eastside Transit Corridor Phase 2 Project is presented in tabular format, designed to ensure compliance with all mitigation measures identified in the Final EIR. Each mitigation measure presented in the table is categorized by environmental topic and mitigation number assigned in the Final EIR. The table identifies the following components for each mitigation measure:

- **Monitoring Action:** The criteria that would determine when the measure has been accomplished and/or the monitoring actions to be undertaken to ensure the measure is implemented
- **Responsible Party for Implementing Mitigation:** The entity accountable for the action
- **Enforcement Agency and Monitoring Phase:** The agency/ices responsible for overseeing the implementation of mitigation, as well as the timing for implementation to occur

## 5.3 Applicability

As discussed in Chapter 1, on December 1, 2022, the Metro Board of Directors voted to advance Alternative 1 with the design options and the Montebello maintenance and storage facility (MSF) and Alternative 3 with the design options and the Montebello MSF (the Locally Preferred Alternative [LPA]) for further evaluation in this Final EIR. **Table 5-1** constitutes the MMRP for Alternative 1 with the design options and the Montebello MSF and Alternative 3 with the design options and the Montebello MSF. The column titled “Applicable Alternative” identifies if the mitigation measures is applicable to Alternative 1 only or if it is applicable to both Alternative 1 and Alternative 3. Several mitigation measures that address biological resources, cultural resources, and hydrology and water quality are only applicable to Alternative 1.

**Table 5-2** provides project measures for the Project. Project measures are design features, best management practices (BMPs), or other measures required by law and/or permit approvals. The column titled “Applicable Alternative” identifies if the mitigation measures is applicable to Alternative 1 only or if it is applicable to both Alternative 1 and Alternative 3. Similar to mitigation measures, certain project measures that address biological resources and hydrology and water quality are only applicable to Alternative 1.

### 5.3.1 Mitigation Measures

**Table 5-1. Alternative 1 and Alternative 3 with Design Options and Montebello MSF Mitigation Monitoring and Reporting Program**

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Biological Resources</b>				
MM BIO-1: Up to a year prior to demolition work occurring at bridges, and in coordination with California Department of Fish and Wildlife (CDFW), bat emergence surveys and nighttime surveys shall be conducted at each affected bridge site to confirm whether bats are roosting on or within 100 feet of any of the bridges affected by construction activities. Surveys shall include identification of any trees within 100 feet of the bridges affected by construction activities that could provide hibernacula or nursery colony roosting habitat. Surveys shall be scheduled by Metro or the contractor. Surveys shall be conducted using ultrasonic detectors and night vision technology in order to capture species and emergence locations. Surveys shall include species classification of detected bat calls to help identify bat species roosting within 100 feet of the construction area. If it is determined that bat species are roosting on or within 100 feet of the bridges affected by construction activities, MM BIO-3 shall be implemented.	Perform bat surveys up to a year prior to demolition work at bridges. If bats are present, implement MM BIO-3.	Metro  Construction contractor	1. Metro / CDFW  2. Pre-construction	1
MM BIO-2: Prior to demolition work occurring at bridges and outside of the bird nesting season for cliff swallows (February 15 to September 15), inactive swallow nests on or within 100 feet of the affected bridges shall be surveyed by a qualified biologist to determine whether they are occupied by roosting bats. Nests shall be removed prior to overwintering use by bats and in a manner that ensures they do not fall to the ground or are otherwise destroyed unless absence of bats is confirmed through inspection by a qualified bat biologist.	Within 100 feet of bridges to be demolished, survey inactive swallow nests for roosting bats. Unoccupied nests to be removed by qualified biologist and occupied nests to be removed by qualified biologist in consultation with CDFW.	Construction contractor	1. Metro  2. Pre-construction	1

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>MM BIO-3: If it is determined that bat species are roosting on or within 100 feet of the affected bridges, consultation with CDFW shall be conducted prior to initiating construction, a CDFW-approved bat exclusion plan shall be developed, and the following measures shall be implemented along with any additional measures required by CDFW to avoid impacts on bat species:</p> <ul style="list-style-type: none"> <li>■ At least six months prior to construction at the affected bridges, alternative roosting sites shall be researched and surveyed by a qualified biologist, and alternative bat habitat (e.g., concrete Oregon wedge enclosure, bat houses, etc.) shall be developed and installed, in coordination with CDFW, at nearby locations to provide alternative habitat for bats displaced by project construction.</li> <li>■ Bat exclusion measures shall be explored and implemented on the bridges and within 100 feet of the affected bridges including tree roosts, or as determined by a qualified bat biologist, to the maximum extent feasible to reduce the potential for bat presence during construction. Bat exclusionary measures could include expandable foam placed in expansion joints and crevices, and sheet plastic fitted with one-way exits in areas where bats are potentially roosting. Bat exclusion shall only be installed during the fall and winter seasons, generally after September 30, to avoid impacts on maternal and juvenile bats. No less than six weeks prior to construction, a qualified biologist shall survey the area to confirm that exclusionary measures have been successful and that no bats remain in the exclusion area. If any bats remain within the exclusion area, appropriate measures shall be developed and implemented, in coordination with CDFW prior to construction at the affected bridges, to prevent impacts on bats.</li> </ul>	<p>If bats are identified in accordance with MM BIO-1, consult with and get approval from CDFW on a bat exclusion plan. Measures identified in the CDFW bat exclusion plan to be implemented by qualified biologist in consultation with CDFW.</p>	<p>Metro  Construction contractor</p>	<p>1. Metro / CDFW  2. Pre-construction</p>	<p>1</p>
<p>MM BIO-4: Prior to the implementation of construction activities (e.g., demolition of structures, excavation, grading, construction of access roads) that would result in removal of or disturbances to vegetation and structures providing bird nesting habitat, prior to pile driving near active bird nests, and prior to tree trimming during the maintenance period, the following shall occur:</p>	<p>Implement measures to avoid nesting birds prior to pile driving and the construction and maintenance</p>	<p>Construction contractor</p>	<p>1. Metro  2. Pre-construction and</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ If construction is scheduled to occur during the bird nesting season (generally February 15 through September 15, and as early as January 1 for some raptors), vegetation that will be impacted by the Project shall be removed in advance of the construction activities and outside the nesting season, if feasible, to avoid take of birds, raptors, or their eggs. If this is not feasible, prior to the implementation of construction activities, one nesting bird survey shall be conducted 72 hours prior to construction or maintenance that shall remove or disturb suitable nesting habitat during the breeding season. The survey shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare a survey report within 24 hours of conducting the survey, documenting the presence or absence of any active nest of a migratory bird. If an active nest is located, an appropriate no-work buffer shall be established and vegetation removal within the buffer shall be postponed until the nest is vacated and juveniles have fledged (minimum of six weeks after egg-laying) and when there is no evidence of a second attempt at nesting. Buffers may be as large as 300 feet for migratory bird nests and 500 feet for raptor nests.</li> <li>■ The following shall occur if Alternative 1 is selected and approved:                     <ul style="list-style-type: none"> <li>○ Swallow Nesting and Exclusion. Demolition work occurring at the Washington Boulevard bridges shall either occur outside of the swallow nesting period (February 15 through September 15) or Metro shall exclude swallows from areas along the bridges where demolition activities would cause nest damage or abandonment (i.e., on any part of the bridges) using netting. The netting shall remain in place until August 1 or until construction activities at the site are complete. The netting shall be anchored such that swallows cannot attach their nests to the structure through gaps in the net. If swallows begin building nests on the structure after net installation, the mud placed by the swallows shall be removed and the net's integrity repaired.</li> </ul> </li> </ul>	<p>period that would remove or disturb vegetation and structures providing bird nesting habitat</p> <p>If construction would occur during nesting season, remove vegetation prior to nesting season or conduct nesting bird survey. If active nests are identified, establish a no-work buffer around the nest.</p> <p>For Alternative 1, Schedule construction outside the swallow nesting period (February 15 through September 15) or exclude swallows from areas where construction activities cause nest damage or abandonment.</p> <p>If demolition of bridges occurs between February 15 and September</p>		maintenance period	

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>○ Swallow Nesting Inspection. If demolition of the Washington Boulevard bridges occurs between February 15 through September 15, the portion of the bridges where construction activities would occur shall be subject to weekly inspection for nesting activity in that time period. If cliff swallows begin colonizing the bridge(s) prior to beginning bridge work, all nest precursors (e.g., mud placed by swallows for construction of nests) shall be washed down at least once daily until swallows cease trying to construct nests. This activity shall not result in harm or death to adult swallows. This weekly inspection and washing activity shall occur until April 1; after that period, no washing activity shall occur to prevent harm or death to eggs or nestlings.</li> <li>○ Swallow Nest Removal. Swallow nests on the Washington Boulevard bridges shall be removed in the fall after nesting season (February 15 to September 15), consistent with MM BIO-2, to further discourage swallows from nesting on the bridges during construction activities occurring within 100 feet of the bridges and only after nests are confirmed to be inactive.</li> </ul>	15, inspect bridge weekly for nesting and wash nesting precursors daily until April 1. Remove inactive nests after nesting season during construction within 100 feet of the bridges.			
MM BIO-5: Prior to construction, the contractor shall prepare an Invasive Plant and Infectious Tree Disease Mitigation Plan to minimize the introduction or migration of invasive plant species into other construction areas. The plan shall be implemented where construction activities cross the rivers and spreading grounds and shall include, at a minimum, the following: <ul style="list-style-type: none"> <li>■ Construction vehicles and equipment shall be cleaned of pathogens and/or invasive or diseased plants and/or seeds with compressed water or air, or similar compression device, before leaving the area of exposed soil during the course of construction.</li> <li>■ Cleaning of equipment shall occur within a designated containment area to avoid the spread of pathogens, invasive plant seeds, or plant parts.</li> </ul>	Prepare and implement Invasive Plant and Infectious Tree Disease Mitigation Plan for construction across rivers and spreading	Construction contractor	1. Metro 2. Construction	1

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Materials removed from construction equipment pursuant to this measure shall be disposed of at an appropriate disposal facility in accordance with applicable laws and regulations.</li> <li>■ Trees removed during construction shall be inspected for contagious tree diseases, and diseased trees shall not be transported from the Project site without first being treated using best available management practices relevant for each tree disease observed.</li> </ul>				
MM BIO-6: In accordance with the Invasive Plant and Infectious Tree Disease Mitigation Plan identified in MM BIO-5 for construction across rivers and spreading grounds, the contractor shall wash soil and plant material off all equipment tires and treads or otherwise clean the construction vehicles and equipment as specified in the Plan before moving from one construction area, or area of exposed soil to another (or moving to and from the staging area to the area of exposed soil).	Implement Invasive Plant and Infectious Tree Disease Mitigation Plan for construction across rivers and spreading grounds.	Construction contractor	1. Metro 2. Construction	1
<b>Cultural Resources</b>				
MM CUL-1: Protection Measures – Differential Settlement/Vibration/Tunnel Boring Machine (TBM) Specifications for CVS/Golden Gate Theater. The contractor shall conduct a pre-construction baseline survey and building protection report, implement building protection measures as specified in the building protection report, and conduct a post-construction survey of the CVS/Golden Gate Theater in relation to Guideway Alignment construction adjacent to the historical resource. Building protection measures shall be implemented in conjunction with MM NOI-1 through MM NOI-15. <ul style="list-style-type: none"> <li>■ The contractor shall conduct a pre-construction survey to establish baseline, preconstruction conditions and to assess the building category and the potential for ground borne vibration to cause damage. Geotechnical investigations shall be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. This analysis shall inform the development of appropriate support mechanisms for cut and fill construction areas or areas that could experience differential settlement as a result of using a tunnel boring machine (TBM) in close proximity to the historical resource. An architectural historian or historical</li> </ul>	Prepare pre-construction baseline survey and building protection report. Final design documents to be reviewed by a qualified historian or historical architect.  Implement building protection measures based on results of the building protection report.	Construction contractor	1. Metro 2. Pre-construction / Construction / Post-construction	1 3/LPA



Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>architect who meets the Secretary of the Interior’s Professional Qualification Standards (36 CFR Part 61) shall review final design documents prior to implementation of measures.</p> <ul style="list-style-type: none"> <li>■ The contractor shall implement building protection measures as identified in the building protection report to protect the structure from vibration damage. This may include methods such as underpinning, soil grouting, or other forms of ground improvement, as well as lower vibration equipment and/or construction techniques. If the building protection report determines the historical resource has the potential to be impacted by differential settlement caused by TBM construction, appropriate building protection measures shall be identified and implemented such as the use of an earth pressure balance or slurry shield TBM. The implementation of the required measures and their effectiveness shall be documented in a post-construction survey.</li> <li>■ A post-construction survey shall also be undertaken to ensure that no significant impacts had occurred to historical resources. An architectural historian or historical architect who meets the Secretary of the Interior’s Professional Qualification Standards (36 CFR Part 61) shall prepare an assessment of the implementation of the mitigation measures.</li> </ul>	<p>Conduct post-construction survey with a mitigation measure implementation assessment prepared by qualified architectural historian or historical architect.</p>			
<p>MM CUL-4: Protection Measures – Avoidance for the Dal Rae Restaurant Sign. If Alternative 1 is selected, the contractor shall conduct a pre-construction baseline survey, implement building protection measures, and conduct a post-construction survey of the Dal Rae Restaurant Sign in relation to at-grade alignment construction with a sliver property acquisition adjacent to the historical resource.</p> <ul style="list-style-type: none"> <li>■ The contractor shall conduct a pre-construction survey to establish baseline, preconstruction conditions and to assess the potential for damage related to improvements within the sliver property acquisition. An architectural historian or historical architect who meets the Secretary of the Interior’s Professional Qualification</li> </ul>	<p>Conduct a pre-construction baseline survey that identifies protection measures to be reviewed by a qualified architectural historian or historical architect.</p>	<p>Construction contractor</p>	<p>1. Metro 2. Pre-construction/ Construction / Post-construction</p>	<p>1</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>Standards (36 CFR Part 61) shall review proposed protection measures.</p> <ul style="list-style-type: none"> <li>■ The contractor shall implement building protection measures such as fencing or sensitive construction techniques based on final project design.</li> <li>■ A post-construction survey shall be undertaken to ensure that no significant impacts had occurred to the historical resource. An architectural historian or historical architect who meets the Secretary of the Interior’s Professional Qualification Standards (36 CFR Part 61) shall prepare an assessment of the implementation of the mitigation measure.</li> </ul>	<p>Implement building protection measures. Conduct a post-construction survey with a mitigation measure implementation assessment prepared by a qualified architectural historian or historical architect.</p>			
<p>MM CUL-7: Site of the Battle of Rio San Gabriel. Archaeological monitoring during ground disturbance shall be conducted at the Site of the Battle of Rio San Gabriel, in accordance with the project Cultural Resources Monitoring and Mitigation Plan (CRMMP). The project alignment between Bluff Road in the east and the eastern boundary of the Rio Hondo Spreading Grounds in the west are within the territory through which the Battle of Rio San Gabriel took place and are considered sensitive for cultural resources related to the battle. If monitoring does not reveal any archaeological artifacts, then there would be no effect on the Site of the Battle of Rio San Gabriel. If archaeological artifacts are discovered, the qualified archaeologist shall assess the significance of the find and then implement the treatment measure plan, if necessary. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation.</p>	<p>Monitor during ground disturbance at the Site of the Battle of Rio San Gabriel in accordance with the CRMMP (MM CUL-8). If artifacts are encountered, halt work until a qualified archaeologist assesses find and implements treatment measures plan if necessary.</p>	<p>Metro Construction contractor</p>	<p>1. Metro 2. Pre-construction / Construction</p>	<p>1</p>
<p>MM CUL-8: Unknown Archaeological Resources. Prior to any ground-disturbing activities, all construction personnel involved in ground-disturbing activities shall be provided with appropriate cultural resources training. The training shall instruct the personnel regarding the legal</p>	<p>Provide cultural resources training for workers, including how to</p>	<p>Construction contractor Qualified archaeologist /</p>	<p>1. Metro</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>framework protecting cultural resources, typical kinds of cultural resources that may be found within the project area, and proper procedures and notifications for if cultural resources are inadvertently discovered.</p> <p>In addition, the contractor shall retain a qualified archaeologist to prepare a project-wide Cultural Resources Monitoring and Mitigation Plan (CRMMP) that shall be implemented during construction. This document shall address areas where potentially significant prehistoric and historic archaeological deposits are likely to be located within the Area of Direct Impact (ADI) based on background research and a geoarchaeological analysis. Preparation of the CRMMP shall necessitate the completion of pedestrian survey of the private property parcels in the ADI that were not accessible during the preparation of the Eastside Transit Corridor Phase 2 Cultural Resources Impacts Report. The CRMMP shall include a detailed prehistoric and historic context that clearly demonstrates the themes under which any identified subsurface deposits would be determined significant. Should significant deposits be identified during earth-moving activities, the CRMMP shall address methods for data recovery, anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation. The CRMMP shall also require that a qualified Archaeologist in prehistoric and historical archaeology (36 CFR Part 61) be retained prior to ground-disturbing activities. The CRMMP will be a guide for monitoring activities. If buried cultural resources, such as flaked or ground stone, historic debris, building foundations, or non-human bone, are discovered during ground-disturbing activities, halt work in that area and within 50 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation. As detailed in MM TCR-1, a Native American monitor shall be retained if treatment involves work at a prehistoric site, or to monitor ground disturbing activities at other locations determined appropriate during tribal consultation. An archaeological monitor will be retained for work at locations identified as sensitive during tribal consultation that require a tribal monitor or other locations identified as likely to contain archaeological resources. Identified areas shall be</p>	<p>proceed if cultural resources are discovered.</p> <p>Complete pedestrian survey of private property parcels. Develop and implement a CRMMP as specified in the mitigation measure. If artifacts are encountered, halt work until a qualified archaeologist assesses and, if necessary, develops treatment measures. If treatment involves work at a prehistoric site, retain Native American monitor (see also MM TCR-1).</p>	<p>Native American monitor</p>	<p>2. Pre-construction / Construction</p>	

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
monitored by, or under the supervision of, the qualified Archaeologist, in accordance with the Project CRMMP. If during cultural resources monitoring the qualified archaeologist determines that the sediments being excavated are previously disturbed or unlikely to contain significant cultural materials, the qualified archaeologist can specify that monitoring be reduced or eliminated.				
MM CUL-9: Unanticipated Discovery of Human Remains. If human remains are discovered, work in the immediate vicinity of the discovery shall be suspended and the Los Angeles County Coroner contacted. If the remains are deemed Native American in origin, the Coroner shall contact the Native American Heritage Commission (NAHC) and identify a Most Likely Descendant (MLD) pursuant to PRC Section 5097.98 and CEQA Guidelines Section 15064.5. The MLD may inspect the site within 48 hours of being notified and issue recommendations for scientific removal and nondestructive analysis. If the MLD fails to make recommendations, then Metro and/or the landowner may rebury the remains in a location not subject to further disturbance at their discretion. Work may be resumed at the discretion of Metro but will only commence after consultation and treatment have been concluded. Work may continue on other parts of the project while consultation and treatment are conducted.	Follow procedures for consultation and treatment if human remains are discovered, including suspending work in the immediate vicinity of the discovery.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
<b>Geology, Soils, Seismicity, and Paleontological Resources</b>				
MM GEO-1: The contractor shall retain a qualified paleontologist and a qualified paleontological monitor to carry out the following tasks: Prepare a Paleontological Resource Mitigation and Monitoring Plan (PRMMP) that includes identification and mapping of the areas of high sensitivity to be monitored during construction. These areas are defined as all areas within the Older alluvium in the project site where planned excavation will exceed three feet below the surface or three feet into undisturbed sediments and all areas within the Younger alluvium in the project site where planned excavation will exceed 10 feet below the surface or 10 feet into undisturbed sediments. The qualified paleontologist shall supervise the qualified paleontological monitor to monitor excavation in areas identified as likely to contain paleontological resources with the exception of TBM excavation, where monitoring is infeasible. The qualified paleontologist shall retain the	Retain qualified paleontologist and paleontological monitor to prepare a PRMMP and identify and monitor excavation areas where paleontological resources are likely to occur, excluding TBM excavation.	Construction contractor  Qualified paleontologist / paleontological monitor	1. Metro  2. Construction	1  3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>option to reduce monitoring if, in his or her professional opinion, sediments being monitored are previously disturbed. Monitoring may also be reduced if the potentially fossiliferous units are determined to have low potential to contain fossil resources.</p>				
<p>MM GEO-2: Monitoring for paleontological resources and salvage of fossils shall occur in compliance with the Paleontological Resource Mitigation and Monitoring Plan (PRMMP) required by mitigation measure MM GEO-1. The PRMMP shall specify that the qualified paleontologist and the qualified paleontological monitor are equipped to salvage fossils and samples of sediment as they are unearthed to avoid construction delays and empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Since Older alluvium yields small fossil specimens (microvertebrate fossils) likely to go unnoticed during typical large-scale paleontological monitoring, the PRMMP shall identify that matrix samples shall be collected and processed to determine the potential for small fossils to be recovered prior to substantial excavations in those sediments. If this sampling indicates that these units do possess small fossils, a matrix sample of 6,000 pounds shall be collected at various locations, to be specified by the paleontologist, within the construction area. These matrix samples shall also be processed for small fossils.</p>	<p>Paleontological monitor to salvage fossils/sediment samples as they are unearthed in compliance with procedures identified in the PRMMP (MM GEO-1).</p>	<p>Construction contractor  Qualified paleontologist / paleontological monitor</p>	<p>1. Metro 2. Construction</p>	<p>1 3/LPA</p>
<p>MM GEO-3: The Paleontological Resource Mitigation and Monitoring Plan (PRMMP) required under mitigation measure MM GEO-1 shall specify procedures for the discovery, recovery, preparation, and analysis of significant paleontological resources encountered during construction, in accordance with standards for recovery, reporting, and curation established by the Society of Vertebrate Paleontology (SVP). The qualified paleontologist shall make certain that recovered specimens be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrate and vertebrate fossils.</p>	<p>Prepare recovered specimens for identification and preservation, in compliance with procedures identified in the PRMMP (MM GEO-1).</p>	<p>Metro  Qualified paleontologist / paleontological monitor</p>	<p>1. Metro 2. Construction / Post-construction</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>MM GEO-4: Curation of specimens shall occur in compliance with the Paleontological Resource Mitigation and Monitoring Plan (PRMMP) required by mitigation measure MM GEO-1. The PRMMP shall identify criteria for identifying specimens to be curated into a professional accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to the professional accredited museum repository, shall signify completion of the program to mitigate impacts to paleontological resources.</p>	<p>Catalogue and submit recovered specimens to a professional accredited museum repository in compliance with procedures identified in the PRMMP (MM GEO-1).</p>	<p>Metro  Qualified paleontologist / paleontological monitor</p>	<p>1. Metro  2. Construction / Post-construction</p>	<p>1 3/LPA</p>
<p><b>Hazards and Hazardous Materials</b></p>				
<p>MM HAZ-1: Phase II Environmental Site Assessment (ESA). Before any substantial ground disturbance occurs on or near the properties with documented releases, Metro shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment to determine the potential presence of petroleum hydrocarbons, metals (i.e., lead that was aerially deposited and lead chromate) that exceed thresholds established by the California Health and Safety Code and Title 22, and VOCs in soil and/or groundwater in accordance with the findings and recommendations of the Draft Final Initial Site Assessment Report prepared for Alternative 1 (Washington Alternative) (Kleinfelder 2021).  The Phase II ESA shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II ESA shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board (RWQCB) and/or the Department of Toxic Substances Control (DTSC). If the Phase II ESA identifies contaminant concentrations above the screening levels, a site-specific soil and groundwater management plan shall be prepared and implemented as described in Mitigation Measure HAZ-2. Metro shall consult with the Los Angeles RWQCB, DTSC, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.</p>	<p>Metro to retain qualified professional to conduct Phase II Environmental Site Assessment.</p>	<p>Metro</p>	<p>1. Metro  2. Pre-construction</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>MM HAZ-2: Soil and Groundwater Management Plan. Prior to excavation, a site-specific soil and groundwater management plan shall be prepared by Metro’s contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation and construction activities. Metro shall consult with the Los Angeles Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed. The soil and groundwater management plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the shall include the following:</p> <ul style="list-style-type: none"> <li>■ Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel;</li> <li>■ Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste, procedures for containing, handling, and disposing of groundwater generated from construction dewatering, the method used to analyze excavated materials and groundwater for hazardous materials likely to be encountered at specific locations, appropriate treatment and/or disposal methods;</li> <li>■ Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies;</li> <li>■ Minimum requirements for site-specific health and safety plans, to protect the general public and workers in the construction area.</li> <li>■ Prior to excavation, the Contractor shall prepare the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker safety manuals and</li> </ul>	<p>Contractor to prepare a site-specific soil and groundwater management plan in consultation with relevant agencies as specified in the mitigation measure. Construction contractors to develop safety manuals and construction work plans and implement training requirements. Stop work if contaminated groundwater is encountered, notify Los Angeles RWQCB, sample groundwater suspected of contamination, and develop remediation plan if warranted.</p>	<p>Construction contractor</p>	<p>1. Metro / Los Angeles RWQCB / DTSC (if warranted)  2. Pre-construction / Construction</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>construction work plans and training requirements, per MM HAZ-4.</p> <ul style="list-style-type: none"> <li>■ Metro’s contractor shall sample groundwater suspected of contamination. If any contaminated groundwater is encountered during construction, the contractor will stop work in the vicinity, cordon off the area, and contact Metro and will immediately notify RWQCB. In coordination with the RWQCB, an investigation and remediation plan will be developed in order to protect public health and the environment. Any hazardous or toxic materials will be disposed according to local, state, and federal regulations.</li> </ul>				
<p>MM HAZ-3: Contractor Specifications. Metro shall include in its contractor specifications the following requirement relating to hazardous materials:</p> <ul style="list-style-type: none"> <li>■ During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic compounds and other subsurface gases for concentrations exceeding U.S. Environmental Protection Agency (USEPA) Regional Screening Levels and/or Department of Toxic Substances Control (DTSC) Screening Levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be halted and materials tested. An investigation shall be designed and performed to verify the presence and extent of contamination at the site, and a site-specific soil and groundwater management plan, as described under Mitigation Measure HAZ-2 above, shall be prepared and implemented.</li> </ul>	<p>Metro to include hazardous materials requirements in contractor specifications. Contractor to inspect and monitor soil and groundwater for signs of contamination. If contamination detected, halt work and test materials. If necessary, develop an investigation and site-specific management plan. (MM HAZ-2)</p>	<p>Metro Construction Contractor</p>	<p>1. Metro 2. Pre-construction / Construction</p>	<p>1 3/LPA</p>



Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>MM HAZ-4: Safety Manuals and Construction Work Plans. The contractor shall prepare site-specific Safety Manuals and Construction Work Plans that address worker health and safety to protect the general public and workers in the construction area for Metro’s review and approval. The Safety Manuals and Construction Work Plans shall be prepared in accordance with State and California Division of Occupational Safety and Health (Cal/OSHA) regulations. Copies of the plans shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The plans shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The plans shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.</p>	<p>Contractor to provide site-specific Safety Manuals and Construction Work Plans as specified in the mitigation measure.</p>	<p>Construction contractor</p>	<p>1. Metro 2. Pre-construction</p>	<p>1 3/LPA</p>
<p>MM HAZ-5: Hazardous Building Survey and Abatement. Prior to demolition activities of any structures, Metro shall retain a California Division of Occupational Safety and Health (Cal/OSHA) certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and PCB-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District (SCAQMD) Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). Following completion of removal activities, Metro shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed.</p>	<p>Metro to retain qualified contractor to evaluate hazardous building materials. Contractor to determine the presence or absence of hazardous building materials or equipment, prepare and submit a workplan if necessary, and prepare and submit documentation of proper removal if required.</p>	<p>Metro Cal/OSHA certified contractor</p>	<p>1. Metro / Relevant Oversight Agency (if required) 2. Pre-construction / Construction / Post-construction</p>	<p>1 3/LPA</p>

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Hydrology and Water Quality</b>				
MM HWQ-1: If water is present in the Rio Hondo, Rio Hondo Spreading Grounds, or the San Gabriel River, the work area shall be isolated so that construction does not occur in water. The work area isolation method shall be determined through an agreement between Metro and Los Angeles County Flood Control District (LACFCD) and shall involve use of a coffer dam, a by-pass channel, management of the water in the system by LACFCD, or other means.	Isolate water present in the work area.	Metro Construction contractor	1. Metro / LACFCD 2. Pre-construction / Construction	1
MM HWQ-2: To compensate for potential loss of flood storage due to placement of light rail transit (LRT) bridge piers or enhanced bridge supports in federally authorized and Los Angeles County Department of Public Works (LACDPW) flood control facilities, Metro shall construct compensatory mitigation within the impacted flood control facility based on the volume of the flood storage loss and hydraulic analysis in compliance with applicable Federal, state, and local requirements, such as the Rivers and Harbors Act Section 408 program. Exact compensatory mitigation requirements shall be determined based on the volume of the loss of flood storage and a hydraulic analysis of the impacts on flood storage and flood flows. The compensatory storage must allow floodwaters to flow freely into and out of the storage area in a similar manner as pre-Project conditions. In general, the compensatory mitigation shall occur at or below the elevation of the impact and the hydraulics of the mitigation design must function to prevent any change in flood elevations upstream of the Detailed Study Area (DSA) of Alternative 1. The area chosen for compensatory mitigation must be free draining (e.g., pooled water must be able to flow out of the storage area as floodwaters recede) and shall comply with drainage requirements of LACDPW. A hydrology report to assess changes in hydrologic activity, velocity of flows, and water availability onsite and downstream of the Project and assess scour or erosion at the Project site will be prepared and submitted to CDFW in conjunction with the Lake and Streambed Alteration Notification for the Project.	Conduct hydraulic analysis of impacts of LRT bridge piers or supports on flood storage/flows. Construct compensatory mitigation within impacted flood control facilities as required by federal, state, and local requirements. Prepare hydrology report and submit to CDFW.	Metro Construction contractor	1. Metro / U.S. Army Corps of Engineers, LACDPW / CDFW 2. Pre-construction / Construction	1

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Noise and Vibration</b>				
MM NOI-1: Metro shall require the Contractor to develop a construction noise control plan and a construction noise monitoring plan to minimize noise impacts. The construction noise plan shall include construction noise performance criteria. At a minimum, the performance criteria shall prohibit construction noise from exceeding the FTA general assessment construction noise criteria of 80 dBA for nighttime work and 90 dBA for daytime work at residential properties, or 100 dBA at commercial or industrial properties for daytime or nighttime work. These criteria shall be measured at the boundary of any occupied property where the noise is being received.	Contractor to prepare noise control plan and construction noise monitoring plan with performance criteria as specified in the mitigation measure for Metro review/approval.	Metro  Construction contractor	1. Metro  2. Pre-construction / Construction	1 3/LPA
MM NOI-2: Metro shall require the Contractor to use construction methods that avoid pile-driving at locations containing noise- and vibration-sensitive receptors, such as residences, schools, and hospitals where practicable. Metro's Contractor shall use cast-in-drilled hole (CIDH) or drilled piles rather than impact pile drivers if necessary to meet construction noise performance criteria established in the construction noise control plan and construction noise monitoring plan.	Use CIDH or drilled piles at locations containing noise- and vibration-sensitive receptors where necessary to meet noise performance criteria (MM NOI-1).	Metro  Construction contractor	1. Metro  2. Construction	1 3/LPA
MM NOI-3: Metro shall require the Contractor to erect temporary noise barriers between noisy activities and noise sensitive receptors as necessary to ensure compliance with applicable construction noise performance criteria as specified in the construction noise monitoring plan developed under MM NOI-1. During construction, Metro shall perform audits to monitor the effectiveness of the noise barriers.	Contractor to install temporary noise barriers as specified.	Metro  Construction contractor	1. Metro  2. Construction	1 3/LPA
MM NOI-4: Metro shall require the Contractor to locate construction equipment and material staging areas away from sensitive receptors where practicable.	Locate construction equipment and material staging areas away from sensitive receptors.	Metro  Construction contractor	1. Metro  2. Construction	1 3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
MM NOI-5: Metro shall require the Contractor to route construction traffic and haul routes along roads in areas without receptors sensitive to noise and vibration, where practicable.	Route construction traffic and haul routes through areas without noise-sensitive receptors, where practicable. Obtain approval of construction traffic and haul routes from Metro. Cross-reference to compliance with MM TRA-1 traffic management plan.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-6: Metro shall require contractors to use best available control technologies to limit excessive noise when working near residences (e.g., piling noise shrouds) where practicable.	Use best available noise control technologies where practicable.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-7: (MM NOI-1 has been revised to clarify that FTA general construction noise criteria for nighttime construction work shall not be exceeded).	Comply with MM NOI-1	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-8: Metro shall notify the public, including schools, of construction operations and schedules. Metro shall provide a construction-alert publication and set up a Construction Hotline that shall reply to complaints within 2 working days.	Notify public of construction activities/ schedules. Establish a Construction Hotline and respond to complaints.	Metro	1. Metro  2. Pre-construction / Construction	1  3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
MM NOI-9: Metro shall require the Contractor to comply with FTA groundborne noise and vibration criteria confirmed in the construction noise monitoring plan for tunnel construction, including spoil removal and transport of segmental tunnel lining. This shall include, where necessary, methods such as installation of temporary tunnel track with smooth rail and wheels, and/or car speeds that limit structure-borne noise and vibration, or use of spoil removal conveyor.	Use spoil removal conveyor for the TBM. If a spoil removal conveyor is not practicable, submit a justification to Metro for approval. Follow noise reducing specifications.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-10: Metro shall require the Contractor to not stage trucks in residential areas.	Do not stage trucks in residential areas.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-11: Metro shall require temporary and permanent tunnel vent fans to be located away from residences. Metro shall require that noise from these shall be attenuated to comply with the noise control plan and local code requirements for fixed stationary heating, ventilation, and air conditioning (HVAC) or other machinery noise.	Place ventilation fans away from sensitive receptors. Implement measures to attenuate noise levels as specified.	Metro  Construction contractor	1. Metro  2. Construction	1  3/LPA
MM NOI-12: Within the tunnel, Metro shall reduce operational vibration impacts through use of track support systems which incorporate resilience, such as ballast mats, high resilience track fasteners, resiliently supported ties or floating track slabs as necessary to be below FTA criteria for frequent annoyance from operational vibration. FTA criteria for frequent annoyance is an exceedance of 72 vibration decibels (VdB) at residential uses and 75 VdB at daytime institutional uses, including schools, for more than 70 events per day.	Within the tunnel, use track support systems if necessary to be below FTA criteria for frequent annoyance from operational vibration.	Metro  Construction contractor	1. Metro  2. Design / Construction	1  3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
MM NOI-13: Metro shall reduce vibration impacts where necessary to be below FTA criteria for frequent annoyance due to gaps at switches by methods such as installing ballast mats or other resilient fixings under conventional switches to “decouple” the train vibration from the track supporting structure or using a monoblock frog or other low vibration switches. FTA criteria for frequent annoyance from operational vibration is an exceedance of 72 vibration decibels (VdB) at residential uses and 75 VdB at daytime institutional uses including schools for more than 70 events per day.	Use equipment that reduces vibration at switches if necessary to be below FTA criteria for frequent annoyance from operational vibration.	Metro Construction contractor	1. Metro 2. Design / Construction	1 3/LPA
MM NOI-14: Metro shall identify selected properties that may be susceptible to vibration damage within 100 feet of the alignment to determine the baseline structural integrity and condition of walls and joints using methods such as photographic documentation of the interior walls and/or exterior façade as a basis for comparison after construction is completed.	Metro to identify properties that may be susceptible to vibration damage and determine baseline conditions for comparison after construction is completed.	Metro	1. Metro 2. Pre-construction	1 3/LPA
MM NOI-15: Metro shall require the Contractor to develop a construction vibration control plan and a construction vibration monitoring plan to minimize vibration impact and reduce the risk of damage to susceptible structures. The construction vibration control plan shall specify implementation of vibration control measures to ensure that vibration during construction activities shall not exceed peak particle velocity (ppv) 0.2 inches per section (ips) at any non-engineered timber and masonry building.	Contractor to develop a construction vibration control plan and a construction vibration monitoring plan for Metro for review and approval.	Metro Construction contractor	1. Metro 2. Pre-construction / Construction	1 3/LPA
<b>Transportation and Traffic</b>				
MM TRA-1: The contractor shall prepare a Traffic Management Plan as needed to facilitate the flow of traffic in and around construction zones. The Traffic Management Plan shall include, at minimum, the following measures:	Prepare a traffic management plan to facilitate traffic flow in and around	Metro Construction contractor	1. Metro	1 3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Where feasible, schedule construction-related travel (i.e., deliveries) during off-peak hours and maintain two-way traffic circulation along affected roadways during peak hours.</li> <li>■ Designated routes for project haul trucks shall be located along the Project corridor ROW and/or major streets connecting to construction staging areas and the nearest freeways (e.g., SR-60, I-5, and I-605). Major streets may include Atlantic Boulevard, Saybrook Avenue, Telegraph Road, Washington Boulevard, Paramount Boulevard, Rosemead Boulevard, Slauson Avenue, and Whittier Boulevard. In cooperation with the jurisdictions along the alignment and implemented throughout the construction process, these routes shall be consistent with local land use and mobility plans and situated to minimize noise, vibration, and other possible impacts.</li> <li>■ Contractors shall maintain safe and convenient pedestrian routes to school by ensuring project haul routes and construction traffic, to the greatest extent possible, avoid any published school pedestrian routes.</li> <li>■ Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through-traffic in adjacent residential areas.</li> <li>■ Develop and implement an outreach program and public awareness campaign in coordination with transit agencies to inform the general public about the construction process and planned roadway closures, potential impacts, and mitigation measures, including temporary bus stop relocation.</li> <li>■ Develop and implement a program with business owners to minimize effects to businesses during construction activity, including but not limited to signage programs and identification of detours (particularly for truck access).</li> <li>■ Where feasible, temporarily restripe roadways to maximize the vehicular capacity at locations affected by construction closures.</li> </ul>	construction zone that includes the components specified in the mitigation measure.		2. Pre-construction / Construction	

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at locations affected by construction closures.</li> <li>■ Traffic control officers at major intersections during peak hours shall be provided as required by the Traffic Management Plan and Worksite Traffic Control Plans if delays are related to construction activities.</li> <li>■ Provide wayfinding signage, lighting and access to specify pedestrian safety amenities (such as handrails, fences, and alternative walkways) during construction.</li> <li>■ Where construction encroaches on sidewalks, walkways, crosswalks, and multi-use trails, special pedestrian safety measures shall be used, such as detour routes and temporary pedestrian shelters.</li> <li>■ Provide detour routes and signage to address temporary effects to multi-use trails and bicycle circulation, and minimize inconvenience (e.g., lengthy detours) as to minimize users potentially choosing less safe routes if substantially rerouted.</li> <li>■ Regular communication with school administrators shall be maintained to ensure sufficient notice of construction activities and/or detours, that could affect pedestrian routes to schools is provided.</li> <li>■ Construction flaggers shall be implemented any time a construction ingress or egress is located within 200 feet of a schools' student entrance during school hours.</li> <li>■ Metro's construction outreach efforts shall include reaching out to local school district administrators to provide advanced information regarding construction activities and/or detours if construction activities will affect bus routes and stops to schools.</li> <li>■ Access to adjacent businesses and schools (including access to passenger loading areas for student drop-offs at schools) shall be provided via existing or temporary driveways or loading zones during business and school hours throughout the construction period.</li> </ul>				



Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Tribal Cultural Resources</b>				
MM TCR-1: Tribal Cultural Resources Training. Prior to any ground-disturbing activities, all construction personnel involved in ground-disturbing activities shall be provided with appropriate Tribal Cultural Resources training. The training shall instruct the personnel regarding the legal framework protecting Tribal Cultural Resources, typical kinds of Tribal Cultural Resources that may be found within the project area, and proper procedures and notifications if Tribal Cultural Resources are inadvertently discovered.	Provide Tribal Cultural Resources training to all construction personnel involved in ground-disturbing activities.	Construction contractor	1. Metro 2. Pre-construction	1 3/LPA
MM TCR-2: Retain a Native American Monitor. A Native American monitor shall be retained for work at locations identified as sensitive during tribal consultation and agreed upon between the lead agency and the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government. The monitor shall only be present on-site during the construction phases that involve ground disturbing activities where areas of ground disturbance and/or removed spoils are visible for inspection. If during cultural resources monitoring the qualified archaeologist or Native American Monitor determines that the sediments being excavated are previously disturbed or unlikely to contain significant cultural materials, the qualified archaeologist or Native American Monitor can recommend that monitoring be reduced or eliminated.	Retain a Native American monitor as specified in the mitigation measure for work at locations identified as sensitive during tribal consultation and agreed upon between the lead agency and the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government.	Metro	1. Metro 2. Construction	1 3/LPA
MM TCR-3: Unknown Tribal Cultural Resources. The contractor shall retain a qualified archaeologist to prepare a project-wide Cultural Resources Monitoring and Mitigation Plan (CRMMP) that shall be implemented during construction. This document shall address areas where potentially significant prehistoric and historic archaeological deposits, and Tribal Cultural Resources are likely to be located within the Area of Direct Impact (ADI) based on background research, a geoarchaeological analysis, and Tribal consultation. The CRMMP shall encompass both archaeological and Tribal Cultural Resources and shall be kept confidential. Preparation of the CRMMP shall necessitate the completion of pedestrian survey of the private	Complete pedestrian survey of private property parcels. Develop and implement a CRMMP as specified in the mitigation measure. Retain qualified Native American	Construction contractor  Qualified archaeologist / Native American monitor	1. Metro 2. Pre-construction / Construction	1 3/LPA

Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>property parcels in the ADI that were not accessible during the preparation of this Eastside Transit Corridor Phase 2 EIR.</p> <p>The CRMMP shall include a detailed prehistoric and historic context that clearly demonstrates the themes under which any identified resources would be determined significant. Should significant deposits be identified during earth-moving activities, where feasible, the CRMMP shall address methods for data recovery, anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation or other methods of disposition in consultation with the Tribe.</p> <p>The CRMMP shall also require that an archaeologist qualified in prehistoric and historical archaeology and a Native American monitor who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the Native American Heritage Commission (NAHC)'s Tribal Contact list for the area of the project location be retained prior to ground-disturbing activities. The CRMMP shall be a guide for monitoring activities. If buried Tribal Cultural Resources or cultural resources, such as flaked or ground stone, historic debris, building foundations, or non-human bone, are discovered during ground-disturbing activities, work shall stop in that area and within 50 feet of the find until a qualified archaeologist and Native American Monitor can assess the significance of the find and, if necessary, develop appropriate treatment measures. If resources are Native American in origin and may also be Tribal Cultural Resources, treatment and curation of these resources shall be determined in consultation with the Tribe. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation.</p>	<p>monitor and qualified archaeologist with authority to stop work and develop treatment measures if buried resources are discovered. (See also MM CUL-8.)</p>			

## 5.3.2 Project Measures

As in **Section 5.3**, project measures are design features, BMPs, or other measures required by law and/or permit approvals. **Table 5-2** provides project measures for the Project. The column titled “Applicable Alternative” identifies if the mitigation measures is applicable to Alternative 1 only or if it is applicable to both Alternative 1 and Alternative 3.

**Table 5-2. Alternative 1 and Alternative 3 with Design Options and Montebello MSF Project Measures**

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Geology, Seismicity, Soils, and Paleontological Resources</b>				
PM GEO-1: The Build Alternatives shall be designed and constructed per the Metro Rail Design Criteria (MRDC). The MRDC incorporates various design specifications from the Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), the State of California, the County of Los Angeles, and other sources by reference. Key compliance sections of the MRDC relative to geology and soils are Section 5.3, Section 5.4, Section 5.6, and MRDC Section 5 Appendix, Metro Supplemental Seismic Design Criteria. Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In addition, Caltrans and the County of Los Angeles Building Code (based on the California Building Code [CBC]) have independent design criteria for bridges and aerial structures (Caltrans) and building structures (County of Los Angeles) that are also required. In accordance with the MRDC, geotechnical report recommendations shall be incorporated into the project plans and specifications. These recommendations shall be a product of final design and shall address potential subsurface hazards. Without these report recommendations, the project plans and specifications shall not be approved and the Build Alternatives will not be allowed to advance into the final design stage or into construction.	Ensure Project is designed in compliance with MRDC, the California Seismic Hazards Mapping Act, industry standards, and recommendations contained in the design level geotechnical report.	Metro	1. Metro 2. Pre-construction	1 3/LPA
<b>Hazards and Hazardous Materials</b>				
PM HAZ-1: Operational BMPs for the Build Alternatives shall include but not be limited to: <ul style="list-style-type: none"> <li>■ Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage and disposal. Staff shall be required to use, store, and dispose of these materials properly in accordance with label directions.</li> <li>■ Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response,</li> </ul>	Label cleaning and maintenance products with cautions and instructions for handling, storage and disposal. Use, store, and dispose of these materials in accordance with	Construction contractor  Maintenance contractor	1. Metro 2. Pre-construction / Construction / Post-construction	1 3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>Compensation, and Liability Act (CERCLA), the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with DTSC and/or LARWQCB.</p> <ul style="list-style-type: none"> <li>■ The contractor shall coordinate with fire and police protection officials when designing grade crossings to ensure that emergency access would be maintained. Metro shall be included in all correspondence with third parties.</li> <li>■ All new LRT guideway, stations, and crossings shall be designed in accordance with Metro Rail Design Criteria (MRDC), including Fire/Life Safety Design Criteria, to ensure safety and minimize potential hazards at all locations.</li> <li>■ Compliance with applicable Los Angeles County and city requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.</li> </ul>	<p>directions and regulatory requirements. Comply with regulations related to proper transportation, use, and storage of hazardous materials. Design all new LRT guideway, stations, and crossings in accordance with MRDC and coordinate with fire and police protection officials during design.</p>			
<p>PM HAZ-2: Construction BMPs for the Build Alternatives shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>■ Metro’s contractor shall be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with USEPA, SWRCB, DTSC, Cal/OSHA, and the SCAQMD.</li> <li>■ Development of a stormwater pollution prevent plan (SWPPP) in accordance with the State Water Resources Control Board Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The SWPPP shall include specifications for the following but not limited to:</li> </ul>	<p>Obtain permits and comply with appropriate regulatory agency standards. Implement SWPPP and associated BMPs in accordance with the SWRCB General Construction Permit. Transport hazardous</p>	<p>Metro Construction Contractor</p>	<p>1. Metro 2. Pre-construction / Construction</p>	<p>1 3/LPA</p>

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>○ Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.</li> <li>○ Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.</li> <li>○ Implement drainage BMPs to protect water quality, such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens. Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) at the work site when handling materials.</li> <li>○ Report hazardous spills to the designated Certified Unified Program Agency (CUPA) (i.e., Los Angeles County Fire Department Health Hazardous Materials Division or Santa Fe Springs Department of Fire-Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.</li> <li>○ Establish properly designed, centralized storage areas to keep hazardous materials fully contained.</li> <li>○ Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) at the work site when handling materials.</li> <li>○ Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.</li> <li>■ Transportation of hazardous materials shall comply with State regulations governing hazardous materials transporting included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. This includes:</li> </ul>	materials and dispose of contaminated soils and hazardous building materials in accordance with regulations.  Follow standard practices and prepare a Traffic Management Plan (see MM TRA-1).			

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>○ Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.</li> <li>○ Require the transport of hazardous materials via routes with the least overall travel time.</li> <li>○ Prohibit the transportation of hazardous materials through residential neighborhoods.</li> <li>○ Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.</li> <li>○ Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.</li> <li>■ Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving the Los Angeles County region.</li> <li>■ Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.</li> <li>■ Standard practices shall be followed that include scheduling of lane and/or road closures to minimize disruptions and preparation of a Traffic Management Plan (see MM TRA-1) that is approved with authorities having jurisdiction in coordination with local fire and police departments prior to construction.</li> </ul>				
<p>PM HAZ-3: Operational (post construction) BMPs for the MSF Site Options shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>■ If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 California Health and Safety Code, Metro shall prepare a Hazardous Materials Business Plan (HMBP) in accordance with all related requirements of the California Health and Safety Code, chapter 6.95, Articles 1</li> </ul>	If needed, prepare and submit a Hazardous Materials Business Plan (HMBP) in accordance with the California Health and Safety Code.	Construction contractor  Maintenance contractor	1. Metro  2. Pre-construction / Construction / Post-construction	1 3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>and 2. The plan shall be reviewed and recertified every year and amended as required by the Health and Safety Code, Chapter 6.95, Articles 1 and 2.</p> <ul style="list-style-type: none"> <li>Compliance with applicable City of Montebello design criteria (as applicable) pertaining to emergency vehicle access as well as the California Fire Code standards shall ensure that sufficient ingress and egress routes are provided to the MSF site options.</li> </ul>	Comply with applicable city design criteria pertaining to emergency vehicle access as well as California Fire Code standards.			
<p>PM HAZ-4: Construction BMPs for the MSF Site Options shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>Cal/OSHA regulates worker exposure during construction activities that disturb LBP. Any ACMs, if present, require appropriate abatement of identified asbestos prior to demolition pursuant to the SCAQMD Rule 1403.</li> <li>PCB-containing fluorescent light fixtures and electrical transformers that are not labeled “No PCBs,” shall be assumed to contain PCBs, and shall be removed prior to demolition activities and be disposed of by a licensed and certified PCB removal contractor, in accordance with local, State, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner.</li> <li>Standard practices shall be followed that include scheduling of lane and/or road closures and detours to minimize disruptions and preparation of a Traffic Management Plan (see MM TRA-1) that is approved with the authorities having jurisdiction in coordination with local fire and police departments prior to construction.</li> </ul>	Ensure any asbestos-containing materials (ACMs), are abated prior to demolition, per SCAQMD Rule 1403. Remove items expected to contain PCBs prior to demolition and dispose of property. Ensure electrical transformers are removed by the utility owners. Follow standard practices and prepare a Traffic Management Plan (see MM TRA-1) approved with authorities having jurisdiction and in coordination with fire and police departments.	Metro  Construction Contractor  Utility Owners	1. Metro  2. Pre-construction / Construction	1 3/LPA



Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>PM HAZ-5: Construction BMPs for the Commerce/Citadel station site may include but not be limited to:</p> <ul style="list-style-type: none"> <li>■ Metro’s contractor shall sample soil suspected of contamination (obvious signs of contamination includes indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements. If excavated soil is suspected or known to be contaminated, Metro’s contractor shall:                             <ul style="list-style-type: none"> <li>○ Segregate and stockpile the excavated material in a way that will facilitate measurement of the stockpile volume.</li> <li>○ Spray the stockpile with water or an SCAQMD approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers.</li> </ul> </li> <li>■ Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.</li> </ul>	<p>Sample soils suspected of contamination and if contaminated, segregate and stockpile, spray with water or a vapor suppressant, and cover. Allow existing groundwater monitoring wells under ongoing groundwater investigations associated with off-site sources to remain.</p>	<p>Metro  Construction Contractor</p>	<p>1. Metro  2. Pre-construction / Construction</p>	<p>1 3/LPA</p>
<b>Hydrology and Water Quality</b>				
<p>PM HWQ-1: Operational (post-Project) BMPs for the Build Alternatives (may include but shall not be limited to):</p> <ul style="list-style-type: none"> <li>■ Design to reduce impervious surfaces.</li> <li>■ Treatment of stormwater runoff using infiltration BMPs such as detention basins or tanks, infiltration basins, bioretention facilities media filters, porous pavement, or vegetated filter strips to remove particulate pollutants.</li> </ul>	<p>Install post-project BMPs to minimize stormwater pollution, as required in National Pollution Discharge Elimination System (NPDES) permits, low impact development standards, and local policies.</p>	<p>Construction contractor  Maintenance contractor</p>	<p>1. Metro  2. Pre-construction / Construction / Post-construction</p>	<p>1 3/LPA</p>

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>PM HWQ-2: Construction BMPs for the Build Alternatives (may include but shall not be limited to):</p> <ul style="list-style-type: none"> <li>■ Establishment of an erosion and sediment control plan prior to the initiation of construction activities that includes BMPs such as:                             <ul style="list-style-type: none"> <li>○ Use of natural drainage, detention ponds, sediment ponds, or infiltration pits to allow runoff to collect and to reduce or prevent erosion.</li> <li>○ Use of barriers to direct and slow the rate of runoff and to filter out large-sized sediments.</li> <li>○ Use of downdrains or chutes to carry runoff from the top of a slope to the bottom.</li> <li>○ Control of the use of water for irrigation so as to avoid off-site runoff.</li> </ul> </li> <li>■ Development of a SWPPP subject to regular inspections by applicable jurisdictions to ensure compliance. The SWPPP shall include specifications for the following, but shall not be limited to:                             <ul style="list-style-type: none"> <li>○ Properly designed, centralized storage areas to keep hazardous materials fully contained.</li> <li>○ Keeping spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) at the work site when handling materials.</li> <li>○ Monitoring program to be implemented by the construction site supervisor that includes both dry and wet weather inspections.</li> </ul> </li> <li>■ Implementation of BMPs designed to reduce erosion of exposed soil including, but not limited to, soil stabilization controls, water for dust control, perimeter silt fences, placement of straw wattles, and sediment basins.                             <ul style="list-style-type: none"> <li>○ If ground disturbing activities must take place during the rainy season when the potential for erosion is greater, the BMPs selected shall focus on erosion control and keeping soil and sediment in place.</li> </ul> </li> </ul>	Prepare and implement a SWPPP and erosion control plan in compliance with SWRCB's NPDES Construction General Permit.	Metro  Construction Contractor	1. Metro  2. Pre-construction / Construction	1  3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>○ End-of-pipe soil/sediment control measures (e.g., basins and traps) shall be used as secondary measures.</li> <li>○ Ingress and egress from construction sites shall be carefully controlled to minimize off-site tracking of soil.</li> <li>■ Locating staging areas outside of the spreading grounds and rivers where possible.</li> <li>■ Implementation of drainage and grading plans and BMPs designed to protect water quality such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens.</li> <li>■ To protect fish and wildlife species, Metro shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting or similar material, in stream areas. Metro shall require the use of certified weed-free material for erosion control when working in areas of exposed soil.</li> <li>■ Metro shall not allow drill cuttings, drilling mud, and/or materials or water contaminated with bentonite, or any other substance deemed deleterious to fish or wildlife, to enter the stream or be placed where they may be washed into the stream. Any contaminated water/materials from the drilling and/or project activities shall be pumped or placed into a holding facility and removed for proper disposal. The contractor shall develop a frac-out contingency plan, which will establish operational procedures and responsibilities for the prevention, containment, and clean-up of frac-outs associated with proposed drilling activities.</li> </ul>				

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
PM HWQ-3: Avoidance of In-Water Work (Applies to Alternative 1 only) <ul style="list-style-type: none"> <li>■ To the extent feasible, construction work within the Rio Hondo, Rio Hondo Spreading Grounds, and San Gabriel River shall be scheduled to occur in the dry season when there is no water.</li> </ul>	To the extent feasible, ensure construction work within the Rio Hondo, Rio Hondo Spreading Grounds, and San Gabriel River is scheduled during the dry season.	Metro  Construction Contractor	1. Metro  2. Pre-construction / Construction	1
PM HWQ-4: Flood Events (Applies to Alternative 1 Only) <ul style="list-style-type: none"> <li>■ If a flood event inundates LRT tracks within the DSA of Alternative 1 during operation of the Project, operation of the train system shall not occur.</li> <li>■ If a flood event occurs in the DSA of Alternative 1 during construction of the Project, construction activities shall cease, and equipment and materials shall be moved to a safe location outside of the floodwaters.</li> </ul>	Cease operation of the train system if tracks are inundated by flood waters. If a flood event occurs during construction, cease construction activities and move equipment and materials to a safe location outside of floodwaters.	Metro  Construction Contractor	1. Metro  2. Construction / Post-construction	1
<b>Land Use and Planning</b>				
PM TRA-1, as detailed below, shall be implemented during construction of the Build Alternatives.				

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<b>Noise</b>				
PM NOI-1: Operational (post-Project) design standards for the Build Alternative may include but are not limited to: <ul style="list-style-type: none"> <li>■ Design per Metro Rail Design Criteria (MRDC) to reduce operational noise of the TPSSs which would mandate the location of traction power substations (TPSS) to be 45 dBA at 50 feet or at the setback line of the nearest building or occupied area, whichever is closer.</li> </ul>	Design each TPSS in accordance with the MRDC to ensure noise does not exceed 45 dBA at 50 feet or at the setback line of the nearest building or occupied area.	Construction contractor	1. Metro 2. Pre-construction / Construction	1 3/LPA
PM NOI-2: Construction activities shall comply with Metro’s baseline specifications Section 01 56 19, Construction Noise and Vibration Control. Although Metro, as a state-chartered transportation agency, is exempt from local noise ordinances, the agency is committed to consistency with local construction noise limits whenever feasible and reasonable in accordance with its own construction specifications. Metro’s contractor shall utilize control measures from Metro’s specifications that effectively minimize noise and vibration impacts in the community. Some mitigation measures shown in Section 3.11, Noise and Vibration, are based on the provisions set forth in Section 01 56 19 and are refined to have more specificity towards the Project-related impacts concerning noise and vibration. Under PM NOI-2, the Project shall comply with the entirety of Metro’s baseline specifications Section 01 56 19 and Metro’s contractor would utilize control measures from its own specifications that effectively minimize noise and vibration impacts in the community, such as: <ul style="list-style-type: none"> <li>■ Conducting at-grade construction activities adjacent to residential neighborhoods during the daytime whenever practicable.</li> <li>■ Requiring special permits for construction within a specified distance and a specified time period for residential zones during the nighttime and weekends.</li> <li>■ Using construction equipment with effective noise-suppression devices whenever feasible.</li> </ul>	Comply with Metro’s baseline specifications Section 015619, Construction Noise and Vibration Control. Wherever feasible, be consistent with local construction noise limits. Utilize control measures from contractor specifications that effectively minimize noise and vibration.	Construction contractor	1. Metro 2. Pre-construction / Construction	1 3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Using noise control measures, such as enclosures and noise barriers, as necessary to protect the public and achieve compliance with Metro’s noise limits.</li> <li>■ Conducting all operations in a manner that will minimize, to the greatest extent practicable, disturbance to the public in areas adjacent to the construction activities and to occupants of nearby buildings.</li> </ul>				
<b>Public Services and Recreation</b>				
<p>PM PSR-1: Operational BMPs for the Build Alternatives (may include but would not be limited to):</p> <ul style="list-style-type: none"> <li>■ The contractor shall coordinate with fire and police protection officials when designing grade crossings to ensure that access for police and fire protection services is maintained. Metro shall be included in all correspondence with third parties.</li> <li>■ Metro shall supplement existing police protection services by providing Transit Services Bureau officers and contracted police services at all new LRT facilities, as needed to ensure that adequate police protection services are provided.</li> </ul>	Coordinate with fire and police protection officials when designing grade crossings. Supplement existing police protection services by providing Transit Services Bureau officers and contracted police services at all new LRT facilities as needed.	Metro  Construction contractor	1. Metro  2. Pre-construction / Post-Construction	1 3/LPA
<b>Transportation</b>				
<p>PM TRA-1: Operational BMPs for the Build Alternatives shall include the following:</p> <ul style="list-style-type: none"> <li>■ Sidewalks shall not be altered to the extent that pedestrian circulation would be impaired or in violation of ADA standards.</li> <li>■ Additional enhancements to the existing signalized crosswalks, such as marked crosswalks, shall further improve pedestrian circulation and non-motorized access to transit stations.</li> </ul>	Ensure implementation of BMPs during project operation to ensure safety, including maintain safe pedestrian, bicyclist, and vehicular access,	Metro  Maintenance contractor	1. Metro  2. Pre-construction / Construction / Post-Construction	1 3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Metro shall coordinate with local jurisdictions to enhance walkability in the immediate vicinity of the proposed station areas.</li> <li>■ Operation of the Project shall not conflict with any identified local programs, plans, or policies for circulation elements in coordination with local jurisdictions.</li> <li>■ New traffic signals or modifications to existing traffic signals (e.g., signal phasing changes) to accommodate light rail movements, traffic circulation patterns at intersections, grade crossings, and to facilitate pedestrian access to/from stations (e.g., mid-block crossings at stations) shall be designed in accordance with Metro Rail Design Criteria (MRDC) and standards.</li> <li>■ Bicycle circulation and access amenities shall be provided in the immediate station areas. Amenities may include bike parking and connections to existing nearby bike facilities within up to a 600-foot radius to improve bicycle-to-transit connections and shall be determined during preliminary engineering.</li> <li>■ Proposed bicycle facilities that intersect the Build Alternatives at applicable intersections shall remain accessible and allow bicyclists and pedestrians to cross at those intersections.</li> <li>■ Project operations shall not preclude vehicle or truck access along Washington Boulevard and left-turn movements shall continue to be allowed to and from major cross-streets (e.g., Garfield Avenue, Greenwood Avenue) at signalized intersections.</li> <li>■ Stations and grade crossings shall be designed in accordance with Metro Rail Design Criteria (MRDC), including Fire/Life Safety Design Criteria, to ensure safety and minimize potential hazards at all locations.</li> <li>■ The Project shall be operated per applicable State, Metro, and city design criteria and standards, including adherence to design codes and standards such as the California Division of Occupational Safety and Health Administration (Cal/OSHA), California Public Utilities Commission (CPUC), California Manual of Uniform Traffic Control Devices (CA MUTCD), and Metro safety and security programs and standards (i.e., MRDC and Metro Systemwide</li> </ul>	compliance with applicable criteria and safety standards such as for traffic circulation and grade crossings, and do not allow uncontrolled mid-block crossing of tracks.			

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<p>Station Design Standards Policy), to ensure emergency vehicle access and building standards ensure that response times are maintained and at acceptable levels.</p> <ul style="list-style-type: none"> <li>■ Best practice safety measures shall be implemented to minimize potential conflicts between vehicles and pedestrians. Measures may include mid-block crosswalks, signal-protected pedestrian movements, channelization, barriers, high visibility curbs between the guideway and roadway to prohibit vehicles from driving onto the tracks, barriers to protect and route pedestrians, ADA-compliant curb ramps, and warning signs to provide for convenient and safe access to station platforms.</li> <li>■ Uncontrolled mid-block vehicular crossings of tracks and mid-block left-turns shall not be permitted and shall be physically prohibited by a curb between the roadway and at-grade guideway with a fence between the two tracks in the center of the guideway whenever feasible.</li> <li>■ Grade crossings shall include traffic signal coordination and upgrades in accordance with MRDC to avoid conflicts between LRVs and eastbound traffic along Washington Boulevard.</li> <li>■ Vehicular and pedestrian crossings across the at-grade segments of the alignment shall be limited to intersections controlled by traffic signals.</li> </ul>				
<p>PM TRA-2: Construction BMPs for the Build Alternatives shall include the following:</p> <ul style="list-style-type: none"> <li>■ Cooperation with the corridor cities and the County shall occur throughout the construction process. Restrictions on haul routes may be incorporated into the construction specifications according to local permitting requirements.</li> <li>■ Pedestrian access to adjacent properties along the Build Alternatives shall be maintained during construction.</li> <li>■ Construction-related traffic circulation changes shall generally be localized to the work area.</li> </ul>	Ensure implementation of BMPs during project construction that includes ensuring pedestrian, bicyclist, and vehicular access is maintained, fire and police station access is	Metro  Construction contractor	1. Metro  2. Pre-construction / Construction	1  3/LPA



Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
<ul style="list-style-type: none"> <li>■ Construction activities shall comply with California Division of Occupational Safety and Health Administration (Cal/OSHA) and Metro safety and security programs.</li> <li>■ Safety for pedestrians, bicyclists, multi-use trail users (i.e., hikers, bicyclists, equestrians), and motorists shall be maintained during construction; methods may include signage, partial lane closures, and construction barriers.</li> <li>■ Access to the LACFD Fire Station 50 on Saybrook Avenue shall be maintained during construction and the launch of the TBM.</li> <li>■ Metro shall coordinate with staff of the East Los Angeles Sheriff Station, LACFD Fire Station 50, and PIH Health Whittier Hospital in advance of any construction activities to preserve station access.</li> <li>■ Lane and/or road closures shall be scheduled to minimize disruptions, including detour routes, in coordination with authorities having jurisdiction and local fire and police departments prior to construction. The nearest local first responders shall be notified, as appropriate, of traffic control measures in the Traffic Management Plan (see MM TRA-1) during construction to coordinate emergency response routing.</li> <li>■ The Project shall be designed and constructed per applicable State, Metro, and city design criteria and standards, including adherence to design codes and standards such as Cal/OSHA, California Public Utilities Commission (CPUC), California Manual of Uniform Traffic Control Devices (CA MUTCD), and Metro safety and security programs and standards (i.e., MRDC and Metro Systemwide Station Design Standards Policy).</li> </ul>	maintained, construction complies with applicable criteria and safety standards, and roadway disruption is minimized to the degree feasible.			
PM TRA-3: Operational BMPs for the MSF include the following: <ul style="list-style-type: none"> <li>■ Access shall be maintained to properties to the west of the vacated portion of Acco Street via Yates Avenue.</li> <li>■ Minor changes to traffic circulation, such as new or modified driveways shall be designed according to applicable State, Metro, and city design criteria and standards.</li> <li>■ Any roadway changes shall be designed according to applicable MRDC, state, and local design criteria and standards where</li> </ul>	Implement BMPs during MSF operation to ensure pedestrian, bicyclist, and vehicular access is maintained during MSF operations.	Metro Maintenance contractor	1. Metro 2. Pre-construction / Construction / Post-Construction	1 3/LPA

Project Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase	Applicable Alternative(s)
applicable, including fire code and Fire/Life Safety Design Criteria and standards, and shall provide adequate emergency access.	Design traffic circulation and roadway changes in accordance with applicable criteria and standards.			
PM TRA-4: Construction BMPs for the MSF (must include but not be limited to): <ul style="list-style-type: none"> <li>■ Access to nearby properties shall be maintained throughout the course of construction, and alternative routes shall be available for any streets requiring a full closure (e.g., use of Acco Street shall be routed to Flotilla Street or Washington Boulevard for the Montebello MSF).</li> </ul>	Ensure access to nearby properties is maintained during construction, and provide alternative routes for any streets requiring a full closure.	Metro Construction contractor	1. Metro 2. Pre-construction / Construction	1 3/LPA
<b>Growth-Inducing</b>				
PM GRW-1: Metro shall coordinate with local jurisdictions to develop new corridor-wide governance strategies and implement plans, policies, and economic development strategies to transform station areas into equitable, sustainable and safe areas for development in the Project corridor.	Coordinate with local jurisdictions and Los Angeles County on governance strategies, plans, policies, and economic development strategies in station areas.	Metro	1. Metro 2. Pre-construction / Construction / Post-Construction	1 3/LPA

**Key:**

ACM = asbestos-containing material  
 ADA = Americans with Disabilities Act  
 ADI = Area of Direct Impact  
 BMPs = Best Management Practices  
 CA MUTCD = California Manual of Uniform Traffic Control Devices

dBA = A-weighted decibel  
 DSA = detailed study area  
 DTSC = Department of Toxic Substances Control  
 EIR = Environmental Impact Report  
 ESA = Environmental Site Assessment  
 FHWA = Federal Highway Administration  
 HMBP = Hazardous Materials Business Plan

NAHC = Native American Heritage Commission  
 NPDES = National Pollution Discharge Elimination System  
 PCB = polychlorinated biphenyls  
 PIH = Presbyterian Intercommunity Hospital  
 PRC = Public Resources Code  
 PRMMP = Paleontological Resource Mitigation and Monitoring Plan

Cal/OSHA = California Division of Occupational Safety and Health Administration  
Caltrans = California Department of Transportation  
CBC = California Building Code  
CDFW = California Department of Fish and Wildlife  
CEQA =  
CFR = Code of Federal Regulations  
CIDH = cast-in-drilled hole  
CPUC = California Public Utilities Commission  
CRMMP = Cultural Resources Monitoring and Mitigation Plan  
CUPA = Certified Unified Program Agency

HVAC = heating, ventilation, and air conditioning  
LACDPW = Los Angeles County Department of Public Works  
LACFCD = Los Angeles County Flood Control District  
LACFD = Los Angeles County Fire Department  
LBP = Lead-Based Paints  
LPA = Locally Preferred Alternative  
LRT = Light Rail Transit  
LRV = light rail vehicle  
MLD = Most Likely Descendant  
MMRP = Mitigation Monitoring and Reporting Program  
MRDC = Metro Rail Design Criteria  
MSF = maintenance and storage facility

RCRA = Resource Conservation and Recovery Act  
ROW = right-of-way  
RWQCB = Regional Water Quality Control Board  
SCAQMD = South Coast Air Quality Management District  
SWRCB = State Water Resources Control Board  
SWPPP = stormwater pollution prevent plan  
SVP = Society of Vertebrate Paleontology  
TBM = tunnel boring machine  
TPSS = traction power substations  
USEPA = U.S. Environmental Protection Agency  
VdB = vibration decibels