Attachment A

Mitigation Monitoring and Reporting Program to Ensure Fulfillment of All Environmental and Related Commitments in the FEIS

Crenshaw/LAX Transit Corridor Project

October 2011

MITIGATION MONITORING AND REPORTING PROGRAM

1. Introduction

Section 21081.6 of the California Public Resources Code requires that public agencies approving a project with an Environmental Impact Report (EIR) adopt a Mitigation Monitoring and Reporting Program (MMRP) for that project. The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR to mitigate the potentially significant environmental effects of the project are, in fact, properly carried out. In its findings concerning the environmental effects of a project for which an EIR was prepared, a Lead Agency must also include a finding that a MMRP has been prepared and provides a satisfactory program that would ensure avoidance or sufficient reduction of the significant effects of the proposed project. The mitigation measures included in the FEIS/FEIR will be monitored by the appropriate reviewing agency described in Table 1 of this Mitigation Monitoring and Reporting Program (MMRP).

2. Purpose

Monitoring of the implementation of adopted mitigation measures is required by Public Resources Code Section 21081.6. Therefore, this MMRP has been prepared to ensure compliance with all of the mitigation measures identified in the FEIS/FEIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the proposed project. The implementation of this MMRP shall be carried out by the Metro and other agencies or entities (e.g., construction contractor) specified below or designated by Metro. Mitigation measures will be implemented during: (1) development of the design; (2) preparation of the construction contracts; (3) pre-construction (4) the construction phase; (5) pre-occupancy and (6) project operation.

3. Responsibilities and Duties

Monitoring of mitigation measures has been assigned to specific agencies and/or entities with regard to their particular areas of expertise, as specified in Table 1. Many of these monitoring actions are included in existing policies, laws, and regulations, while others require additional oversight to ensure that mitigation measures are implemented by the construction contractor or other specified parties, and that Metro monitor the implementation of these measures. Monitoring will consist of determining whether:

- Specific issues were considered in the design development phase
- Construction contracts included the specified provisions
- Specific actions occurred prior to construction
- Required measures were implemented during construction and/or after implementation of the project.

4. Monitoring and Reporting Procedures

Upon the request of the Metro, a monthly report affirming compliance with these mitigation measures shall be provided. Where needed, an independent environmental consultant may be retained to ensure mitigation compliance, timely preparation of reports, and to assist Metro or the designated individual or agency. An annual mitigation monitoring report shall be prepared for this project by Metro until compliance with the required mitigation measures is complete. The report shall be placed on file at Metro.

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Displacement and Relocation	Acquisition of 97 parcels, 59 full, 31 in part, 4 permanent underground easements, and 3 laydown areas.	• Metro shall provide relocation assistance and compensation pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act to those who are displaced or whose property is acquired as a result of the Crenshaw/LAX Transit Corridor Project. (DR1)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
Visual and Aesthetics	The loss of landscaping and vegetation would result in a significant impact to visual quality to residences along La Colina Drive and the along Crenshaw Boulevard from 60th to 48th Street.	• To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines. (V1)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		• At locations where existing land uses or vegetation is removed and neighboring residential or sensitive uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels where practical to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated. (V2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		• Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement shall occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works. (V3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /Los Angeles Bureau of Street Services/Inglewood Public Works 2. Metro 3. Design & construction
		• Where practical and appropriate, additional landscaping and enhanced design features will be used to minimize the visual image of the TPSS sites and other ancillary facilities. (V4)	Check design and landscaping plans.	Contractors	1. Metro 2. Metro 3. Design & construction

Applies to Below-Grade Crossing at Centinela Option Only					
Visual and Aesthetics	The loss of landscaping and vegetation would result in a significant impact to visual quality to residences along La Colina Drive.	• For the Centinela Avenue Below-Grade Crossing design option, screening that is consistent with the existing area and Edward Vincent Jr. Park shall be installed on the north side of the trench to the extent feasible to reduce the adverse effects on the south-facing view of the trench. (V5)	Check station plans.	Contractors	1. Metro 2. Metro 3. Design & construction
Applies to Alternate Southwest Portal at Crenshaw/King Station Only					
Visual and Aesthetics	Potential significant visual impact from incompatibility of station portal design with historic Broadway Building at the Crenshaw/King Station	• Should the alternate southwest portal at the Crenshaw/King Station be selected, the structure for the portal will be designed to complement the Streamline Moderne style of the Broadway Department Store consistent with the Secretary of Interior standards. (V6)	Check architectural plans.	Contractors	1. Metro/Secretary of Interior 2. Metro/Certified Cultural Consultant 3. Design & construction
Noise and Vibration	Warning signal noise would exceed the significance criteria at 57th Street and West Boulevard grade crossing. The LPA would exceed the vibration criteria at 16 locations (Table 4-20 of the FEIS/FEIR). Moderate passby noise impacts along La Colina Drive.	• Warning device noise levels shall not exceed 103 dBA at 50 feet, subject to approval by the California Public Utilities Commission. (N1) • Further site-specific testing shall be performed during the Final Design where potential for adverse vibration and ground-borne effects has been identified. Where adverse vibration and ground-borne effects are still predicted, the vibration and ground-borne energy transmitted into the ground shall be decreased using design features such as, but not limited to high-resilience fasteners, ballast mats, or floating slab trackbed. Vibration- and ground-borne-reducing design specifications for the track sections shall be determined in consultation with a qualified vibration scientist or engineer during the design phase. The features shall reduce the vibration levels below the FTA thresholds identified in Table 4 21 and Table 4 22 of the FEIS/FEIR. (N2)	Check compliance with required mitigation measure. Check design plans and compliance with required mitigation measure.	Contractors Contractors	1. Metro /CPUC 2. Metro 3. Design & construction 1. Metro 2. Metro 3. Design & construction
Ecological/ Biological Resources	The project would require the removal or disturbance of mature trees along Crenshaw Boulevard. Removal or disturbance of vegetation during the nesting season could affect the habitat and bird species that are present.	• Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting. (EB1)	Check compliance with required mitigation measure.	Contractors	1. Metro /Certified Biologist 2. Metro 3. Design & construction
		• If construction of the project requires pruning of native tree species on non-Metro-owned land, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree species, the affected tree species shall be relocated or replaced in consultation with	Check design plans and compliance with required mitigation measure.	Contractors	1. Metro /Certified Biologist 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		appropriate jurisdiction. (EB2)			
Geologic/ Seismic	Potential for ground deformation and liquefaction areas to have a significant impact for the project.	▪ A soil mitigation plan shall be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan shall establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan shall include a provision that during grading or excavation activities, soil shall be screened for contamination by visual observations and field screening for volatile organic compounds with a photo ionization detector (PID). Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated or disposed according to guidance identified in proven technologies and remedies of site cleanup prescribed by the Department of Toxic Substance Control. (GEO1)	Check design plans and compliance with required mitigation measure.	Contractors	1. Metro /DTSC 2. Metro 3. Design
Hazards and Hazardous Materials	Potential significant impact from exposure to hazardous materials.	▪ All hazardous materials, drums, trash, and debris shall be removed and disposed of in accordance with regulatory guidelines set forth by the Department of Toxic Substances Control in Title 22 Division 4.5 of the California Code of Regulations. Waste would be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms. A Department of Health Services certified laboratory shall sample waste to determine the appropriate disposal facility. (GEO2)	Check for compliance with required mitigation measure.	Contractors	1. Metro /DTSC 2. Metro 3. Construction
		▪ A health and safety plan shall be developed for sensitive receptors with potential exposure to the constituents of concern identified in the preliminary Geotechnical Report contained in Appendix H. (GEO3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Historical and present site usage along the many areas of the proposed alignment included businesses that stored hazardous materials and/or waste and used USTs, from at least the 1920s to the present. It is possible that areas with soil and/or groundwater impacts may be present that were not identified in this report, or were considered a low potential to adversely impact the subject property. In general, observations shall be made during future	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		development activities for features of concern or areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, soil staining or odorous soils. Further investigation and analysis may be necessary, should such materials be encountered. (GEO4)			
Hazards and Hazardous Materials	Potential significant impact from exposure to hazardous materials.	▪ Best Management Practices (BMPs) identified in Appendix F, required as part of the National Pollutant Discharge Elimination System (NPDES) permit and application of SCAQMD Rule 403, shall be implemented for the proposed project to not only reduce potential soil erosion, but also to maintain soil stability and integrity during grading, excavation, below grade construction, and installation of foundations for aerial structures, and maintenance and operations facilities. BMPs would comply with applicable Uniform Building Codes and include, but are not limited to, scheduling excavation and grading activities during dry weather, covering stockpiles of excavated soils with tarps or plastic sheeting, and debris traps on drains. (GEO5)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB/ SCAQMD 2. Metro 3. Design & construction
		▪ The design of the project shall adhere to the design specifications of the geotechnical study for maintaining structural integrity under static and seismic loading and operational demands. (GEO6)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Water Resources	Potential significant impact on water quality.	▪ During project construction and operation, remediation shall be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes may be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act and shall follow the most current guidance within the NPDES program. (WQ1)	Check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB 2. Metro 3. Construction and Operation
		▪ The flood capacity of existing drainage or water conveyance features within the project study corridor shall not be reduced in a way that causes ponding or flooding during storm events. A drainage control plan shall be developed during project design to ensure that drainage is properly conveyed from the study area and does not induce ponding on adjacent properties. (WQ2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Water Resources	Potential significant impact on water quality.	▪ A dewatering permit shall be required if groundwater is encountered during tunneling operations. If contaminated groundwater is encountered during construction, the contractor shall stop work in the vicinity of the suspect find, cordon off the area, and contact the appropriate hazardous waste coordinator and maintenance hazardous spill coordinator at Metro and immediately notify the Certified Unified Program Agencies (City of Los Angeles Fire Department, County of Los Angeles Fire Department, and Los Angeles RWQCB) responsible for	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB 2. Metro 3. Design & construction
		hazardous materials or waste incidents. Coordination with the Los Angeles RWQCB shall be initiated immediately to develop an investigation plan and remediation plan for expedited protection of public health and environment. Contaminated groundwater is prohibited from being discharged to the storm drain system. The contractor shall properly treat or dispose of hazardous or toxic materials, according to local, state, and federal regulations. Potential treatment methods include, but are not limited to, extraction, treatment and reinjection, bioremediation, recirculating wall technology, deep well treatment, vapor extraction, and natural attenuation. (WQ3)			
		▪ The study area currently drains indirectly to Ballona Creek and Dominguez Creek through the MS4. Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the control of pollutants to the maximum extent practicable. The systems shall be designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A SUSMP and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs. (WQ4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /City of Los Angeles Bureau of Sanitation/City of Inglewood Department of Public Works 2. Metro 3. Design & construction
		▪ During construction of the Project, on-site integrated management strategies that employ green infrastructure strategies to capture runoff and remove pollutants shall be implemented to the extent feasible and cost effective. Green infrastructure strategies include, but are not limited to, a variety of physical, chemical, and biological processes that focus on conveying runoff to bioretention areas, swales, or vegetated open spaces. (WQ5)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Archaeological	Discovery of unknown archaeological resource is possible during	Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the	Check CRMMP; Check for compliance with required mitigation	Metro	1. Metro/Contractor 2. Tribal Representative 3. Design &

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Archaeological	excavation activities and would result in a significant impact if destroyed.	Crenshaw/King Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a ½ mile of the Crenshaw/King Station. If human remains are encountered during construction, all work shall cease in the area of potential affect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code in Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary. A detailed CRMMP would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements: o Worker training o Archaeological monitoring o The scientific evaluation and mitigation of archaeological discoveries o Native American participation, as needed o Appropriate treatment of human remains, if applicable o Reporting of monitoring and mitigation results (CR1)	measure; periodically inspect and monitor construction sites.		construction
Paleontological	Discovery of unknown paleontological resource is possible during excavation activities and would result in a significant impact if	• Paleontological Monitoring o A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within	Check CRMMP; Check for compliance with required mitigation measure; periodically inspect and monitor construction sites.	Contractors	1. Metro 2. Metro /Qualified Paleontologist 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Paleontological	destroyed.	sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. o All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans. o Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. o Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County). o The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository. The final report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age			

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate communications, and a copy of the project-specific paleontological monitoring and mitigation plan. (CR2)			
Community Facilities/ Parklands	Potential effect to flow of pedestrians near Faithful Central Bible Church and La Brea Station.	▪ The project shall incorporate Metro Design Criteria standards for sidewalks to ensure the safe flow of pedestrians. Metro shall coordinate with the City of Inglewood Public Works Department and CPUC for the approval of final design features. (PCF1)	Check design plans; check for compliance with required mitigation measure.	Contractors	4. Metro /City of Inglewood Public Works 5. Metro 6. Design & construction
Safety and Security	Potential safety impact from pedestrian crossings and security at stations.	▪ All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by Metro security personnel on a regular basis. (SS1)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design, construction, and operation
		▪ Metro shall implement a security plan for LRT operations that shall include both in-car and station surveillance by Metro security or other local jurisdiction security personnel and establish well lit pedestrian station and parking areas that minimize shadows and provide visibility for security personnel to monitor activity. (SS2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LAPD/LA Co. Sheriff 2. Metro /LAPD & LA Co. Sheriff 3. Design, construction, and operation
		▪ All stations shall be lit to a standard of no less than two footcandles to minimize shadows and ensure that all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated. (SS3)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Metro shall coordinate and consult with the LAPD, the LA County Sheriff's Department, the Inglewood Police Department, and the LAX Police to develop safety and security plans for the alignment, parking facilities, and station areas which satisfy the requirements necessary for the appropriate policing jurisdiction to effectively patrol the area. (SS4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LAPD/LA Co. Sheriff 2. Metro /LAPD & LA Co. Sheriff (during operation only) 3. Design, construction, & operation
		▪ The station design shall be undertaken to avoid obstructions to visibility or observation and discrete locations favorable to crime; pedestrian access to at-grade, below-grade, and above-grade	Check design plans; check for compliance with required	Contractors	1. Metro 2. Metro 3. Design &

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Safety and Security	Potential safety impact from pedestrian crossings and security at stations.	station entrances/exits shall be accessible at ground-level with clear sight lines. (SS5)	mitigation measure.		construction
		• Metro shall implement appropriate measures to ensure pedestrian crossing safety at all locations with adjacent schools, churches, and high pedestrian areas to satisfy the requirements determined by the CPUC. (SS6)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /CPUC 2. Metro 3. Design & construction
		• Metro shall conduct a Hazard Analysis that establishes a design basis for warning devices that satisfies the requirements set forth by the California Public Utilities Commission. (SS7)	Check design plans; check for implementation of recommended mitigation measure.	Contractors	1. Metro /CPUC 2. Metro 3. Design, construction, & operation
		• Vehicular and pedestrian warning measures, such as signage, shall be provided along the length of the platforms of the LRT Stations. Gates shall be provided at pedestrian crossings of the LRT and/or BNSF tracks within the Harbor Subdivision. These markings will be provided to alert motorists and pedestrians to potential conflict in the area. (SS8)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		• To discourage crossing the alignment and enhance safety, such as near the Faithful Central Bible Church, Metro shall provide fencing along either side of the alignment, between the parking lot and church buildings and provide pedestrian safety devices at designated crossings. (SS9)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction & operation
Construction-Transportation	Temporary traffic lane closures during the day may affect normal traffic flow and bus travel times. Night closures of entire street blocks may require some buses to be temporarily re-routed. Some bus stops may also be temporarily relocated. General construction traffic may affect traffic patterns.	• Metro shall coordinate with the local jurisdictions to designate and identify haul routes for trucks and to establish hours of operation. The selected routes shall minimize noise, vibration, and other impacts. (T1)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LADOT/City of Inglewood Public Works 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Transportation	Temporary traffic lane closures during the day may affect normal traffic flow and bus travel times. Night closures of entire street blocks may require some buses to be temporarily re-routed. Some bus stops may also be temporarily relocated. General construction traffic may affect traffic patterns.	• Metro shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and include the following measures: o Schedule as much construction-related travel as possible (i.e., deliveries, hauling, and worker trips) during the off-peak hours; o Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas; o Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures; o Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures; o Where feasible, traffic control officers shall be at major intersections during peak hours to minimize delays related to construction activities; o Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures; • Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs. (T2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LADOT/City of Inglewood Public Works 2. Metro 3. Design & construction
		• Metro shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible. (T3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		• Metro shall coordinate with local school districts to disclose potential impacts to school bus routes. (T4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		• Project contractors shall provide alternate off-street parking for their employees during the construction period, in order to minimize the loss of parking to adjacent commercial districts. (T5)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		• Project contractors shall prohibit parking for their employees in adjacent residential neighborhoods, in order to minimize the impacts to nearby residents. (T6)	Check for compliance with required mitigation measure	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Visual and Aesthetics	Construction lighting, equipment and staging areas may be visible to nearby sensitive uses.	▪ Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales shall be removed as soon as the area is stabilized. (CON1)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Stockpile areas shall be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses. (CON2)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ During nighttime construction activities, lighting shall be aimed downward and away from residential and other sensitive uses adjacent to the alignment and stations. (CON3)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
Construction-Air Quality	Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds.	▪ Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes. (CON4)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday. (CON5)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site. (CON6)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114. (CON7)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). (CON8)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Traffic speeds on unpaved roads shall be limited to 15 mph. (CON9)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Operations on unpaved surfaces shall be suspended when winds exceed 25 mph. (CON10)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Heavy equipment operations shall be suspended during first and second stage smog alerts. (CON11)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ On-site stockpiles of debris or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be watered at least two times per day or covered at all times when not being used. (CON12)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Air Quality	Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds.	▪ Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications. (CON13)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible. (CON14)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site. (CON15)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction parking shall be configured to minimize traffic interference. (CON16)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible. (CON17)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals. (CON18)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible. (CON19)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Portable generators shall be low-emitting and use ultra low sulfur diesel (<15 parts per million) or gasoline. (CON20)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction equipment shall use a combination of low sulfur diesel (<15 parts per million) and exhaust emission controls. (CON21)	Check for compliance with required mitigation measure.	Contractors	4. Metro 5. Metro 6. Construction
		▪ The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job). (CON22)	Check for compliance with required mitigation measure.	Contractors	7. Metro 8. Metro 9. Construction
		▪ Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices. (CON23)	Check for compliance with required mitigation measure.	Contractors	10. Metro 11. Metro 12. Construction
		▪ Metro shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations. (CON24)	Check for compliance with required mitigation measure.	Metro	13. Metro 14. Metro 15. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Noise and Vibration	Noise and vibration impacts to nearby sensitive receptors during construction of the project.	▪ The construction contractor shall develop and implement a Noise and Vibration Control Plan demonstrating how to achieve the more restrictive of the Metro Design Criteria noise limits and the noise limits of the city noise control ordinance. The Plan shall also show how to achieve FTA vibration limits. The Plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the requirements of Metro, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with contract noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated and St John the Evangelist school administrators to avoid disruptive activities during school hours. (CON25)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the Metro Design Criteria: o The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available. o The contractor shall locate equipment and staging areas as far from noise-sensitive receptors as possible. o The contractor shall limit unnecessary idling of equipment. o The contractor shall install temporary noise barriers as determined by the Noise Control Plan. o The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality. o The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities) where possible. Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter. (CON26)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Geologic/ Seismic/ Hazardous	Potential impacts for encountering hazardous materials during grading and excavation within the Harbor Subdivision.	▪ Soil Mitigation Plan – A soil mitigation plan shall be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction, and implemented. The soil mitigation plan shall establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan shall include a provision that during grading or excavation activities, soil shall be screened for contamination by visual observations and field screening for volatile organic compounds with a PID. Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If hazardous soil is found, it shall be removed, transported to an approved disposal location. (CON27)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Construction-Economic and Fiscal	No significant impacts are anticipated. Mitigation to reduce impacts from the inconvenience and/or disruption to the flow of customers, employees, and materials and supplies to and from corridor businesses.	▪ Nearby business owners and commercial property owners shall be notified of the schedule for specific planned construction activities, changes in traffic flow, and required short-term modifications to property access. (CON28)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ General notice shall be provided to local government, transit agencies, major institutions, and other organizations of the schedule for planned construction activities. (CON29)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Methods shall be developed by which business owners can convey their concerns about construction activities and the effectiveness of mitigation measures during the construction period so activities can be modified to reduce adverse effects. (CON30)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Advance notice shall be provided to affected property owners if utilities would be disrupted for short periods of time and scheduled major utility shut-offs during low-use periods of the day. (CON31)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Construction activities shall be planned to minimize effects on community gatherings, special celebrations, or other similar events. (CON32)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		▪ Public information campaigns shall be conducted to encourage patronage of corridor businesses during the construction period. (CON33)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Environmental Justice	Disrupt minority businesses through the restricted access, changes to local circulation, loss of street parking.	▪ Metro shall make provisions for temporary signage and advertising during construction to maintain access for residents and help businesses that are partially blocked or that have inconvenient access due to construction activity. (CON34)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Applies to Maintenance Facility Only					
Displacement and Relocation	Relocating all of the owners and tenants according to their individual needs, especially with proximity to the airport and available land, would result in a significant impact.	▪ Metro shall set up a business relocation process to oversee the relocation needs of the businesses that would be displaced as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor. In addition, Metro shall attempt to minimize disruption to overall production of businesses that are connected with airport activities by relocating in as close proximity to LAX as possible. (S-DR2)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
		▪ Metro shall work with LAWA to ensure that potential displacement and relocation of rental car businesses are compatible with the long term implementation of the LAX Master Plan consolidated rental car center. (S-DR3)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
Hazardous Materials	Impact from the potential to encounter lead-based paint during demolition of the structures on the maintenance facility site.	▪ An asbestos survey and lead based paint survey shall be conducted on all sites where on-site structures would be demolished or significantly renovated. (S-GEO-4)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to Maintenance Facility Only					
Construction - Noise	Construction activity would exceed the 5-dBA significance threshold at multiple sensitive receptors for the maintenance facility.	▪ Noise barriers (e.g., sound attenuation blankets or solid walls) shall be placed such that the line-of-sight is blocked between sensitive receptors (e.g., residential and institutional land uses) and the project site, as feasible. (S-CON24)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ During the early stages of construction plan development, natural and artificial barriers, such as ground elevation changes and existing buildings, shall be considered for use as shielding against construction noise. (S-CON25)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The contractor shall comply with Standard Specification 1565, FTA noise criteria. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler. (S-CON26)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than metal-tracked equipment) as much as possible. (S-CON27)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The contractor shall submit a noise plan for construction activity associated with the preferred maintenance site alternative. The plan shall be prepared by a qualified acoustical engineer and shall be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at impacted sensitive receptors, and noise reduction measures for sensitive receptor locations where the predicted noise levels exceed the ambient noise level by 5 dBA. Impacted receptors include, but may not be limited to, residences to the west of the preferred maintenance site alternative. (S-CON28)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction