## **Appendix U Project Measures**

#### **GOLD LINE EASTSIDE TRANSIT CORRIDOR PHASE 2**





Prepared for Los Angeles Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012

June 2022



# Appendix U Project Measures

June 2022

Prepared for: Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012

> Prepared by: CDM Smith/AECOM Joint Venture 600 Wilshire Boulevard, Suite 750 Los Angeles, CA 90017

State Clearinghouse Number: 2010011062



#### Table of Contents

1.0	Introduction		. 1
2.0	list of Project Measures		. 2
	2.1	Biological Resources	. 2
	2.2	Geology, Seismicity, Soils, and Paleontological Resources	. 2
	2.3	Hazards and Hazardous Materials	. 2
	2.4	Hydrology and Water Quality	.6
	2.5	Land Use and Planning	• 7
	2.6	Noise	.7
	2.7	Public Services and Recreation	. 8
	2.8	Transportation	. 8
	2.9	Growth-Inducing	11



#### 1.0 INTRODUCTION

Project measures are design features, best management practices, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to all Build Alternatives, design options, and MSF site options and design option(s). Where applicable, project measures are identified in the evaluation of the environmental resource areas in Chapter 3 of this Recirculated Draft EIR. The full list of Project Measures is also provided herein. For additional information see the analysis of the corresponding environmental topic in Chapter 3.

#### 2.0 LIST OF PROJECT MEASURES

#### 2.1 Biological Resources

PM HWQ-3, as detailed in **Section 2.4**, shall be implemented during construction of Alternative 1.

### 2.2 Geology, Seismicity, Soils, and Paleontological Resources

PM GEO-1: The Build Alternatives shall be designed and constructed per the 2018 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.

#### 2.3 Hazards and Hazardous Materials

PM HAZ-1:

Operational (post Project) BMPs for the Build Alternatives shall include but not be limited to:

- 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.
- 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, 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.

- Metro shall coordinate with fire and police protection officials when designing grade crossings to ensure that emergency access would be maintained.
- 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.
- 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.

**PM HAZ-2:** Construction BMPs for the Build Alternatives shall include but not be limited to:

- 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.
- 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:
  - Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.
  - 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.
  - 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.
  - Report hazardous spills to the designated 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.
  - Establish properly designed, centralized storage areas to keep hazardous materials fully contained.



- Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) at the work site when handling materials.
- Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.
- 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:
  - Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.
  - Require the transport of hazardous materials via routes with the least overall travel time.
  - Prohibit the transportation of hazardous materials through residential neighborhoods.
  - Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.
  - Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.
- Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County.
- 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.
- Metro 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 in coordination with local fire and police departments prior to construction.
- **PM HAZ-3:** Operational (post construction) BMPs for the MSF Site Options shall include but not be limited to:
  - 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 an HMBP in accordance with all related requirements of the California Health and Safety Code, chapter 6.95, Articles 1 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.

- Compliance with applicable city of Commerce or 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.
- **PM HAZ-4:** Construction BMPs for the MSF Site Options shall include but not be limited to:
  - Both the federal OSHA and Cal/OSHA regulate 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.
  - PCB-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs," shall be assumed to contains 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.
  - Metro 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 in coordination with local fire and police departments prior to construction.
- **PM HAZ-5:** Construction BMPs for the Commerce/Citadel station site may include but not be limited to:
  - 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:
    - Segregate and stockpile the excavated material in a way that will facilitate measurement of the stockpile volume.
    - 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.
  - Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.



#### 2.4 Hydrology and Water Quality

- **PM HWQ-1:** Operational (post-Project) BMPs for the Build Alternatives (may include but shall not be limited to):
  - Design efforts to reduce impervious surfaces.
  - 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.
- **PM HWQ-2:** Construction BMPs for the Build Alternatives (may include but shall not be limited to):
  - Establishment of an erosion and sediment control plan prior to the initiation of construction activities that includes BMPs such as:
    - Use of natural drainage, detention ponds, sediment ponds, or infiltration pits to allow runoff to collect and to reduce or prevent erosion.
    - Use of barriers to direct and slow the rate of runoff and to filter out large-sized sediments.
    - Use of downdrains or chutes to carry runoff from the top of a slope to the bottom.
    - Control of the use of water for irrigation so as to avoid off-site runoff.
  - 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:
    - Properly designed, centralized storage areas to keep hazardous materials fully contained.
    - Keeping spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) at the work site when handling materials.
    - Monitoring program to be implemented by the construction site supervisor that includes both dry and wet weather inspections.
  - 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.
    - 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.
    - End-of-pipe soil/sediment control measures (e.g., basins and traps) shall be used as secondary measures.



- Ingress and egress from construction sites shall be carefully controlled to minimize off-site tracking of soil.
- Locating staging areas outside of the spreading grounds and Los Angeles County Department of Public Works (LACDPW) right-of-way (ROW) areas where possible.
- 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.
- **PM HWQ-3:** Avoidance of In-Water Work (Applies to Alternative 1 only)
  - 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.
- **PM HWQ-4:** Flood Events (Applies to Alternative 1 Only)
  - 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.
  - 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.

#### 2.5 Land Use and Planning

PM TRA-1, as detailed in **Section 2.8**, shall be implemented during construction of the Build Alternatives.

#### 2.6 Noise

**Operational Project Measures include:** 

- **PM NOI-1:** Operational (post-Project) design standards for the Build Alternative may include but are not limited to:
  - Design efforts 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 (Metro 2018).

Construction Project Measures shall include:

# Metro

- **PM NOI-2:** Construction activities shall comply with Metro's baseline specifications Section 015619, 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 015619 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 015619 and Metro's contractor would utilize control measures from its own specifications that effectively minimize noise and vibration impacts in the community, such as:
  - Conducting construction activities during the daytime whenever practicable.
  - Requiring special permits for construction within a specified distance and a specified time period for residential zones during the nighttime and weekends.
  - Using construction equipment with effective noise-suppression devices whenever feasible.
  - Using noise control measures, such as enclosures and noise barriers, as necessary to protect the public and achieve compliance with Metro's noise limits.
  - 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.

#### 2.7 Public Services and Recreation

- **PM PSR-1:** Operational (post-Project) BMPs for the Build Alternatives (may include but would not be limited to):
  - Metro 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 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.

PM TRA-2 and PM TRA-3, as detailed in **Section 2.8**, shall be implemented during construction of the Build Alternatives.

#### 2.8 Transportation

**PM TRA-1:** Operational BMPs for the Build Alternatives shall include the following:



- Sidewalks shall not be altered to the extent that pedestrian circulation would be impaired or in violation of ADA standards.
- Additional enhancements to the existing signalized crosswalks, such as marked crosswalks, shall further improve pedestrian circulation and non-motorized access to transit stations.
- Metro shall coordinate with local jurisdictions to enhance walkability in the immediate vicinity of the proposed station areas.
- Operation of the Project shall not conflict with any identified local programs, plans, or policies for circulation elements in coordination with local jurisdictions.
- 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.
- 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.
- Proposed bicycle facilities that intersect the Build Alternatives at applicable intersections shall remain accessible and allow bicyclists and pedestrians to cross at those intersections.
- 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.
- 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.
- 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 Occupational Safety and Health Administration (OSHA), California 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), to ensure emergency vehicle access and building standards ensure that response times are maintained and at acceptable levels.
- 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.

- 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.
- Grade crossings shall include traffic signal coordination and upgrades in accordance with MRDC to avoid conflicts between LRVs and eastbound traffic along Washington Boulevard.
- Vehicular and pedestrian crossings across the at-grade segments of the alignment shall be limited to intersections controlled by traffic signals.
- **PM TRA-2:** Construction BMPs for the Build Alternatives shall include the following:
  - Cooperation with the corridor cities shall occur throughout the construction process. Restrictions on haul routes may be incorporated into the construction specifications according to local permitting requirements.
  - Pedestrian access to adjacent properties along the Build Alternatives shall be maintained during construction.
  - Construction-related traffic circulation changes shall generally be localized to the work area.
  - Construction activities shall comply with OSHA, California OSHA, and Metro safety and security programs.
  - Safety for pedestrians, bicyclists, and motorists shall be maintained during construction using signage, partial lane closures, construction barriers, and supervision by safety and security personnel at access points and throughout construction sites.
  - Access to the LACFD Fire Station 50 on Saybrook Avenue shall be maintained during construction and the launch of the TBM.
  - 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.
  - Lane and/or road closures shall be scheduled to minimize disruptions, including detour routes, in coordination with local fire and police departments prior to construction. The nearest local first responders shall be notified, as appropriate, of traffic control measures in the plan during construction to coordinate emergency response routing.



- 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 the Occupational Safety and Health Administration (OSHA), California 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).
- **PM TRA-3:** Operational BMPs for the MSF Site Options include the following:
  - Access shall be maintained to properties to the west of the vacated portion of Acco Street via Yates Avenue.
  - Minor changes to traffic circulation, such as new or modified driveways and the closure of a portion of Corvette Street (between Saybrook Avenue and Davie Avenue) for the Commerce MSF site option shall be designed according to applicable State, Metro, and city design criteria and standards.
  - Any roadway changes shall be designed according to applicable MRDC, including Fire/Life Safety Design Criteria and standards, and shall provide adequate emergency access.
- **PM TRA-4:** Construction BMPs for the MSF Site Options (must include but not be limited to):
  - 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 Corvette Street would be routed to Fleet Street for the Commerce MSF site option, or Gayhart Street, and use of Acco Street shall be routed to Flotilla Street or Washington Boulevard for the Montebello MSF site option and Montebello MSF At-Grade Option).

#### 2.9 Growth-Inducing

**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.