# Attachment B: Revised Mitigation Monitoring and Reporting Program for the West Oakland Link

# REVISED MITIGATION MONITORING AND REPORTING PROGRAM FOR THE WEST OAKLAND LINK

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# Tables and Figures

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# Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) is formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) and the Addendum to the IS/MND prepared for the West Oakland Link (Project or Link), a new bicycle/pedestrian path connection between West Oakland and the bike path leading to the East Span of the San Francisco Oakland Bay Bridge (Bay Bridge) in Oakland, California. The MMRP, found in Table 1 below, lists mitigation measures proposed in the IS/MND prepared for the Project and one avoidance and minimization measure identified in the Addendum to the IS/MND and identifies mitigation monitoring and implementation requirements.

This MMRP has been prepared to comply with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21081.6), which requires Lead Agencies approving a project for which a MND was adopted to adopt an MMRP when mitigation measures are required to avoid significant impacts. The MMRP is intended to ensure compliance with the mitigation measures identified in the IS/MND and the avoidance and minimization measure in the Addendum to the IS/MND during implementation of the Project. This MMRP required the implementation of both the avoidance and minimization measures (AMMs) and the mitigation measures (MMs) identified in the IS/MND and the Addendum to the IS/MND.

The MMRP is organized in a matrix format. The first two columns of Table 1 identify the environmental topics requiring mitigation measures and the corresponding mitigation measures. The third column, entitled "Timeframe for Implementation," refers to when monitoring will occur to ensure that the mitigating action is completed. The fourth column, entitled "Responsibility for Implementation," refers to the party responsible for implementing the mitigation measure. It is noted that BATA intends to enter into an agreement with a different entity to be the construction implementation entity (CIE). This agreement will include provisions for CIE to be responsible for implementing specific mitigation measures as described in this MMRP. The fifth column, entitled, "Oversight of Implementation," refers to the party responsible for oversight or ensuring that the mitigation measures are implemented.

## Table 1: Mitigation Monitoring and Reporting Program

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
|---|---|---|---|---|
| **2.1 AESTHETICS** | | | | |
| | **Avoidance and Minimization Measure AES-1: Apply Textured Surfaces**<br>Community input will ultimately drive the design on aesthetics and finishes used for support columns, elevated structures, and abutment walls so that they incorporate design elements desired by the community. However, at a minimum, a roughened, textured surface shall be used for support columns, elevated structures, and retaining walls. This will soften the verticality of surfaces by providing visual texture and will reduce the amount of smooth surfaces that can reflect light, reducing glare, and be attractive for graffiti. A different texture than the minimum requirement may be used if community input favors such a change. | During design | BATA and project designer | BATA |
| | **Avoidance and Minimization Measure AES-2: Replace Vegetation**<br>Vegetation that is destroyed, damaged, or removed by the Project or through incidental construction activities will be replaced, irrigated, and maintained during a plant establishment period. The plant establishment period for plants installed as part of the Project will be 3 years; 5 years for plants installed through mitigation. In addition, all disturbed areas shall be restored to their previous condition or better. Disturbed areas will be hydroseeded to blend the area into the surrounding context. In addition, tree and shrub plantings may be feasible in disturbed areas, where necessary. | During construction | CIE and construction contractor | BATA |
| **2.3 AIR QUALITY** | | | | |
| | **Mitigation Measure AQ-1: Implement BAAQMD Basic Control Measures to Control Construction-Related Dust and Reduce Exhaust Emissions during Construction**<br>In accordance with the BAAQMD's CEQA Guidelines (2017) and the City of Oakland's Standard Conditions of Approval, the CIE will ensure their construction contractor implements the following BASIC construction-related air pollution control measures at all construction sites to reduce particulate matter emissions from construction activities.<br>a. Water all exposed surfaces of active construction areas (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) at least twice daily (using reclaimed water if possible). Watering will be sufficient to prevent airborne dust from leaving the site, and the frequency will be increased as necessary when wind speeds exceed 15 miles per hour.<br>b. Cover all haul trucks transporting soil, sand, or other loose material offsite.<br>c. Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.<br>d. Pave all roadways, driveways, and sidewalks as soon as feasible. In addition, any building pads will be laid as soon as possible after grading unless seeding or soil binders are used.<br>e. Enclose, cover, water twice daily or apply non-toxic soil stabilizers to exposed stockpiles (dirt, sand, etc.). | During all construction activities | CIE and construction contractor | BATA |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | f. Limit vehicle speeds on unpaved roads to 15 miles per hour<br>g. Minimize idling times by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the CCR). Provide clear signage to this effect for construction workers at all access points.<br>h. Maintain and properly tune all construction equipment in accordance with the manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be in proper condition prior to operation.<br>i. Post a publicly visible sign with the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor will respond and take corrective action within 48 hours. The names and telephone numbers for contact persons at the construction contractor, CIE and the Bay Area Air Quality Management District will also be visible to ensure compliance with applicable regulations.<br>j. All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.<br>k. All trucks and equipment, including tires, shall be washed off prior to leaving the site.<br>l. Site access points to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. | | | |
| | **Mitigation Measure AQ-2: Prepare a Health Risk Assessment prior to Construction near the Wood Street Residences and/or Homeless Services/Housing along Wood Street north of West Grand Avenue and Implement Risk Reduction Measures (as necessary)[1]**<br>a. The CIE and construction contractor shall prepare a site-specific construction HRA for all construction activity within 1,000 feet of the 2011–2195 Wood Street project and/or within 1,000 feet of any homeless service or housing that may be extant during construction north of West Grand Avenue along Wood Street once the construction schedule for such activity is known. This HRA shall be prepared well in advance of construction so that if provision of filtration, as discussed below, can be installed prior to construction in the vicinity.<br>b. For the 2011–2195 Wood Street project, the CIE and construction contractor shall determine the specific measures or features that were approved for the Wood Street project, pursuant to the City's conditions of approval to reduce exposure to existing sources of TACs. Indoor air filtration at the Wood Street project is expected to be equal to MERV-13 or greater efficiency standards, based on the requirements of the West Oakland Community Action Plan. The project sponsor shall also confirm other measures at this building that will be implemented, such as strategic site layout planning, and indoor air quality monitoring unit.<br>c. For homeless services or housing, the CIE and construction contractor shall coordinate with the City of Oakland and homeless service providers to determine whether such services or residents may be present along Wood Street within 1,000 feet of construction, the determine the duration of presence of individuals at the location.<br>d. If the project's construction HRA demonstrates that health risk exposures or PM2.5 concentrations at adjacent receptors would be less than BAAQMD thresholds, then additional mitigation would be unnecessary. | Prior to and during construction | CIE and construction contractor | BATA |

[1] Mitigation Measure AQ-2 is to address cumulative impacts (see discussion below in Section 2.21.1). This mitigation is referred to as Mitigation Measure AQ-4 in the 2020 Air Quality Technical Errata.

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | e. However, if the HRA demonstrates that health risks or PM2.5 concentrations would exceed BAAQMD thresholds, inclusive of the Wood Street project's conditions of approval, then additional mitigation shall be provided by the applicant to reduce risks so that the project's incremental risk is below BAAQMD project thresholds and the project does not contribute to an exceedance of the BAAQMD cumulative threshold. The additional mitigation will include source reductions, such as mandating Tier 4 engines in construction equipment, and/or receptor reductions, such as higher air filtration efficiency standards than those approved for the Wood Street project (e.g., MERV 14 or higher). The use of filtration with higher MERV values, such as MERV-14, would result in additional filtering of particles beyond MERV-13, with up to 84 percent efficiency for MERV-14 for particles less than 1 micron in size.[2] Regarding homeless services or homeless housing residents, this mitigation may include temporary relocation of homeless services or residents of homeless housing as necessary to reduce exposure. | | | |
| **2.4 BIOLOGICAL RESOURCES** | | | | |
| | **Mitigation Measure BIO-1: Install Environmentally Sensitive Area Fencing to Protect the Sensitive Natural Communities, Including Earthen Drainage Ditch**<br>Environmentally sensitive area fencing will be installed to prevent contaminants and debris from entering waters of the State and U.S. and any other sensitive areas within the Project area. Before construction begins, the CIE and construction contractor will retain a qualified biologist to identify the locations of sensitive natural communities for the silt fencing and will mark those locations with stakes or flagging. All fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced areas. | Before commencement of construction activities | CIE and construction contractor | BATA |
| | **Mitigation Measure BIO-2: Avoid Placement of Stormwater Treatment Facilities in Area of Wetland Habitat.**<br>Stormwater treatment facilities will be designed so as to avoid the identified areas of wetland habitat, including the area below I-880 and south of West Grand Avenue. | Before commencement of construction activities | CIE and construction contractor | BATA |
| | **Mitigation Measure BIO-3: Implement Measures to Avoid the Introduction and Spread of Invasive Plants**<br>CIE and construction contractor will be responsible for avoiding the introduction of new invasive plants and the spread of invasive plants previously documented in the Project area. Accordingly, the following measures will be implemented during construction.<br>● Surface disturbance within the construction work area will be minimized to the greatest extent possible.<br>● All disturbed areas will be seeded with certified weed-free native mixes and mulched with certified weed-free mulch (rice straw may be used in upland areas).<br>● Native, noninvasive species will be used in erosion control plantings to stabilize site conditions and prevent invasive species from colonizing. | Prior to and during all construction activities | CIE and construction contractor | BATA |

2 Based on estimates from the U.S. Environmental Protection Agency (https://www.epa.gov/indoor-air-quality-iaq/what-merv-rating-1).

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | **Mitigation Measure BIO-4: Develop and Implement Worker Awareness Training**<br><br>Prior to construction, CIE and construction contractor will retain a qualified biologist to develop and conduct a Worker Awareness Training to inform the contractors and all Project construction workers of their responsibilities regarding biological resources. The training will comprise environmental education about sensitive resources (e.g., trees, wetlands, migratory birds), and the protected status of those resources. The training will include visual aids to assist in identifying regulated biological resources. The training will also include actions that should be taken to protect environmental resources in the Project area. | Before commencement of construction activities | CIE and construction contractor | BATA |
| | **Mitigation Measure BIO-5: Implement Nesting Bird Impact Avoidance Measures**<br><br>The CIE and construction contractor will implement the following nesting bird impact avoidance and minimization measures to protect migratory bird species.<br><br>● Trees and vegetation removal will occur during the non-breeding season for most migratory birds (generally between September 2 and February 14) to the extent feasible.<br><br>● If possible, construction activities will begin prior to the nesting season for most birds (generally, February 15 through September 1). Beginning construction prior to the breeding season will establish a level of noise disturbance that will dissuade noise-sensitive raptors and other birds from attempting to nest within or near the Project area.<br><br>● If beginning construction activities (including vegetation removal) prior to the breeding season is not possible, the CIE and construction contractor will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys before the start of construction. A minimum of three separate surveys will be conducted for migratory birds, including raptors. Surveys will include a search of all trees, shrubs and elevated structures that provide suitable nesting habitat in the Project area. In addition, a 300-foot area around the Project area will be surveyed for nesting raptors. Surveys will occur during the height of the breeding season (March 1 to June 1) with one survey occurring in each of two consecutive months within this peak period and the final survey occurring within 1 week of the start of construction. If no active nests are detected during these surveys, no additional measures are required.<br><br>● If an active nest is found in the survey area, a no-disturbance buffer will be established around the site to avoid disturbance or destruction of the nest site until the end of the breeding season (September 1) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the Project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable in-construction buffer distances may vary between species. | Prior to and during construction | CIE and construction contractor | BATA |
| | **Mitigation Measure BIO-6: Conduct a Tree Survey and, if Protected Trees Are Identified, Comply with Requirements of City's Protected Trees Ordinance**<br><br>During final design of the Project, the CIE and construction contractor will retain a qualified biologist to conduct a tree survey of the estimated 44 trees to be removed, to identify protected trees, as defined by City of Oakland Section 12.36 | Prior to and during construction | CIE and construction contractor | BATA |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | of the City's Municipal Code, in the Project area, and identify trees to be trimmed or removed for Project construction. The tree survey report will include specific characterizations of protected trees (size, species, health) and include graphics identifying the location.<br><br>If construction activities associated with the Project could result in the disturbance, damage, destruction, or removal of individual protected trees, the CIE and construction contractor will obtain a permit from the City of Oakland prior to removal of a protected tree or before doing work that might damage or destroy a protected tree. If construction has the potential to damage or destroy a protected tree, adequate protection will be provided during the construction period for any trees which are to remain standing. Measures deemed necessary by the qualified arborist in consideration of the size, species, condition, and location of the trees to remain may include any of the following:<br><br>● Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work will be securely fenced off at a distance from the base of the tree to be determined by the City Tree Reviewer. Such fences will remain in place for duration of all such work. All trees to be removed will be clearly marked. A scheme will be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.<br><br>● Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures will be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter will be minimized. No change in existing ground level will occur within a distance to be determined by the Tree Reviewer from the base of any protected tree at any time. No burning or use of equipment with an open flame will occur near or within the protected perimeter of any protected tree.<br><br>● No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees will occur within the distance to be determined by the Tree Reviewer from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials will be operated or stored within a distance from the base of any protected trees to be determined by the tree reviewer. Wires, ropes, or other devices will not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, will be attached to any protected tree.<br><br>● Periodically during construction, the leaves of protected trees will be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.<br><br>● If any damage to a protected tree should occur during or as a result of work on the site, the CIE and construction contractor will immediately notify the City of Oakland Office of Parks and Recreation of such damage. If, in the professional opinion of the City Tree Reviewer, such tree cannot be preserved in a healthy State, the Tree Reviewer will require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.<br><br>● All debris created as a result of any tree removal work will be removed by the applicant from the property within two weeks of debris creation, and such debris will be properly disposed of by the applicant in accordance with all applicable laws, ordinances, and regulations.<br><br>Removal of any protected tree requires replacement plantings in the Project area to prevent excessive loss of shade, erosion control, groundwater replenishment, visual screening and wildlife habitat. Tree replacement will be conducted in accordance with the following criteria: | | | |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | • No tree replacement will be required for the removal of non-native species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.<br>• Replacement tree species will consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye) or *Umbellularia californica* (California Bay Laurel) or other species determined by the City Tree Reviewer.<br>• Replacement trees will be of twenty-four (24) inch box size, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.<br><br>In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians | | | |
| **2.5 CULTURAL RESOURCES** | | | | |
| | **AMM CUL-1: Stop Work if Buried Cultural Resources Are Discovered**<br><br>During Project construction, the CIE and construction contractor will ensure that work is stopped work if buried cultural resources are inadvertently discovered during ground-disturbing activities. Buried cultural resources include, but are not limited to, chipped or ground stone, historic debris, building foundations, or human bones. If there is evidence of such resources, work will stop in that area and within 100 feet of the find until a qualified professional archaeologist can assess the significance of the find and develop appropriate treatment measures in consultation with CIE and construction contractor. The CIE and construction contractor will be responsible for ensuring that treatment measures are implemented prior to the resumption of construction on that portion of the site. If discovered resources include human bones, implementation of **AMM CUL-2** is also required. | During construction | CIE and construction contractor | BATA |
| | **AMM CUL-2: If Human Remains Are Discovered, Comply with State Laws Relating to Human Remains.**<br><br>If human bones or remains are inadvertently discovered during Project construction, the CIE and construction contractor, will ensure that work is stopped work if buried cultural resources are inadvertently discovered during ground-disturbing activities. Consequently, if any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains (1) until the County Coroner has been informed and has determined that no investigation as to the cause of death is required and (2), if the remains are of Native American origin:<br>• The coroner will then contact the Native American Heritage Commission, and the Commission will then designate a Most Likely Descendant (MLD).<br>• The MLD has made a recommendation to the landowner or the person responsible for the excavation work regarding the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC Section 5097.98. | During construction | CIE and construction contractor | BATA |
| **2.7 GEOLOGY AND SOILS** | | | | |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | **Mitigation Measure GEO-1: Perform Site-Specific Geotechnical Investigation.**<br><br>To minimize potential geotechnical hazards, BATA and the project designer will hire qualified professionals to perform additional site-specific field investigation and laboratory testing by a professional geologist/engineer and certified analytical laboratory per the specifications outlined in the Preliminary Foundation Report. The additional field investigation and laboratory testing will take place as part of the detailed design phase of the Project. The results will be provided to the CIE and construction contractor for compliance and approval prior to issuance of grading permits.<br><br>The geotechnical investigation will perform additional investigations and laboratory testing to determine soil characteristics, including but not limited to liquefaction susceptibility and expansiveness within the limits of the Project, if deemed necessary, by a professional geologist/engineer and certified analytical laboratory. The additional investigations would include, but not be limited to, review of available literature prepared for other structural and transportation projects in the vicinity of the Project to evaluate the expansive nature of soils within the Project area. In addition, if deemed necessary by a qualified geologist, soils borings and laboratory testing would be conducted to evaluate the expansive nature of the soils within the limits of the Project.<br><br>Should geotechnical hazards soils be found to occur within the limits of the Project, a professional geologist/engineer will prepare appropriate design recommendations, performance standards and BMPs to minimize impacts related to these hazards. The findings of the additional investigations and laboratory testing, if deemed necessary, will take place as part of the detailed design phase of the Project and will be provided to the Lead Agency for compliance and approval prior to issuance of grading permits. | As part of design phase of the Project | BATA and the project designer | BATA |
| **2.8 GREENHOUSE GAS EMISSIONS** | | | | |
| | **Mitigation Measure GHG-1: Implement BAAQMD Measures to Reduce Greenhouse Gas Emissions during Construction**<br><br>The CIE and construction contractor will ensure their construction contractor implements the following BMPs, to the extent feasible, to reduce GHG emissions from construction equipment, consistent with measures recommended by the BAAQMD in their CEQA Guidelines (2017):<br><br>a. Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet.<br><br>b. Use local building materials of at least 10 percent (i.e., 10 percent of materials used will originate locally). Recycle at least 50 percent of construction waste or demolition materials. | During all construction activities | CIE and construction contractor | BATA |
| **2.9 HAZARDS AND HAZARDOUS MATERIALS** | | | | |
| | **Mitigation Measure HAZ-1: Prepare a Phase II Environmental Site Assessment**<br><br>Prior to construction, BATA will ensure a Phase II Environmental Site Assessment (ESA), as recommended in the Phase I ISA (Fugro 2014), is prepared for the portion of the Project area where planned foundations and surface soil disturbance will occur adjacent to the two hazardous materials sites, 1) the former OAB on the west side of I-880, south of the proposed Link, and 2) the Heroic War Dead Army Reserve Center on the west side of I-880, north of the proposed Link on the EBMUD site at 2400 Engineer Road. In addition, and as part of the Phase II ESA, BATA and the | Prior to construction activities | BATA and project designer | BATA |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | project designer will incorporate ADL sampling the unpaved areas requiring excavation within 25-30 feet of the edge of roadway pavement. Handling and disposal of excavated material from these areas shall be determined based on the results of the Phase II ESA sampling.<br><br>The Phase II ESA will include the following:<br><br>● A scope of work consisting of pre-field activities, such as preparation of a Health and Safety Plan, marking boring locations, and obtaining utility clearance, and field activities, such as identifying appropriate sampling procedures, health and safety measures, chemical testing methods, and quality assurance/quality control procedures in accordance with the ASTM Standard.<br><br>● A Sampling and Analysis Plan in accordance with the scope of work.<br><br>● Collection of soil samples per the Sampling and Analysis Plan.<br><br>● Laboratory analyses conducted by a State-certified laboratory.<br><br>● Disposal process including transport by a State-certified hazardous material hauler to a State-certified disposal or recycling facility licensed to accept and treat hazardous waste. | | | |
| | **Mitigation Measure HAZ-2: If Contaminated Soils Exist Onsite or Demolition is Required, Implement Engineering Controls and Best Management Practices to Minimize Exposure to during Construction.**<br><br>In the event that contaminated soils are found to exist onsite (per findings in the Phase II ESA report), the CIE and construction contractor will ensure the construction contractor employs engineering controls and BMPs to minimize human exposure to potential contaminants. Engineering controls and construction BMPs will include, but not be limited to, the following:<br><br>● Contractor employees working onsite will be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response training.<br><br>● Contractor will monitor area around construction site for fugitive vapor emissions with appropriate field screening instrumentation.<br><br>● Contractor will water/mist soil as it is being excavated and loaded onto transportation trucks.<br><br>● Contractor will place any stockpiled soil in areas shielded from prevailing winds.<br><br>● Contractor will cover the bottom of excavated areas with sheeting when work is not being performed.<br><br>The project is not expected to require the demolition of any existing buildings or structures. In the unlikely event that such action is needed, the removal work and any disposal action will be conducted in accordance with DTSC 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* and other applicable federal and state legislations and regulations. | During construction activities | CIE and construction contractor | BATA |
| **2.10 HYDROLOGY AND WATER QUALITY** | | | | |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | **Mitigation Measure HYD-1: Prepare and Implement a Toxic Materials Spill Prevention and Response Plan**<br><br>The CIE and construction contractor will ensure the construction contractor prepares a toxic materials spill prevention and response plan before allowing construction to begin. The plan will specify BMPs to regulate the use of petroleum-based products (fuel and lubricants) and other potentially toxic materials associated with Project construction. The CIE and construction contractor or their construction monitor will routinely inspect the construction site to verity that BMPs specified in the plan are properly implemented and maintained. The CIE and construction contractor or their monitor will notify the construction contractor immediately if there is a noncompliance issue and will require compliance. | Prior to and during construction activities | CIE and construction contractor | BATA |
| | **Mitigation Measure HYD-2: Include Protection of Link Facility in Planning Protection for Other Transportation Facilities**<br><br>BATA/Caltrans will include flood protection of the Link facilities when planning for the protection of other transportation facilities in the vicinity from daily flooding. Other transportation facilities include I-80, the Bay Bridge Toll Plaza, the Maze, I-880 and connecting roadway facilities. BATA/Caltrans will work with the Port of Oakland, EBMUD, and the City of Oakland in developing flood protection measures that are determined necessary, feasible and able to protect both transportation and non-transportation assets in the Project vicinity. This measure would be implemented as part of other improvements included in broader flooding protections to protect other facilities in the area. Since daily flooding of the Project area is currently estimated to occur sometime after 2050 and then only if the higher range of SLR estimates comes to fruition, this mitigation does not require action until 10 years prior to actual predicted inundation. | Ongoing commitment | BATA/Caltrans | BATA |
| **2.17 Transportation** | | | | |
| | **Avoidance and Minimization Measure TRANS-1: Railway Disruption Control Plan**<br><br>Prior to bridge construction over the UPRR railway, the construction implementation entity (CIE) will require the construction contractor to prepare a railway disruption control plan for CIE approval and will implement the plan during construction. The goal of the plan will be to minimize the duration of disruption of passenger and freight operations and maintain reasonable Level of Service (LOS) while allowing for an expeditious completion of construction. The CIE will require the construction contractor to coordinate with freight and passenger rail operators in advance and during any potential disruption to passenger or freight operations. The construction contractor will maintain emergency access to and from rail ROW throughout construction.<br><br>The CIE will require the construction contractor to implement the following coordination and consultation requirements:<br><br>● The contractor will establish a freight stakeholder committee to provide an information and feedback forum prior to and during construction with a minimum of quarterly coordination meetings during construction, which will include representatives from the CIE, UPRR, BNSF passenger rail operators, and freight operators and shippers. | Prior to and during construction activities | CIE and construction contractor | BATA |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | • The contractor will consult with UPRR, BNSF, passenger rail operators, and freight operators and shippers during preparation of the railway disruption control plan, including provision of a draft plan for comment prior to completion. The CIE will review and approve the final plan.<br>• As part of the railway disruption control plan, the contractor will prepare a track closure contingency plan for every proposed track closure describing the duration of closure and the alternative arrangements to facilitate passenger and freight operations.<br>• The contractor will notify the CIE, UPRR, BNSF, passenger and freight operators and users of any planned mainline track closures or limitations of access to other rail facilities at least 3 months prior to the closure or limitation of access.<br>The CIE will make efforts to contain and minimize disruption to freight and tenant passenger services during project construction, while allowing for expeditious completion of construction. Measures that will be implemented throughout the course of project construction will include, but will not be limited to, the following:<br>• Limit number of simultaneous track closures within each subsection, with closure timeframe limited as much as feasible for each closure, unless bypass tracks or alternative routes are available<br>• Provide safety measures for freight and passenger rail operation through construction zones<br>• Require contractors to coordinate with rail dispatch to minimize disruption of rail service in the corridor<br>• Where feasible, limit closure of any tracks for construction activities to periods when train service is less frequent (e.g., weekends, or midday and late evening periods on weekdays)<br>• Limit multitrack closures to one location at a time, as much as feasible<br>• Where multitrack closures result in temporary suspension of passenger rail service, work with local and regional transit providers to provide alternative transit service around the closure area (e.g., increased bus and shuttle service)<br>• Where multitrack closures result in temporary suspension of freight rail service, work with UPRR and freight operators and users to schedule alternative freight service timing to minimize disruption to freight customers<br>• Provide advance notice to transit riders of any temporary disruption in passenger rail service | | | |
| | **Mitigation Measure TR-1: Implement Signal Upgrade and Crosswalk Improvement at West Grand Avenue/Frontage Road/I-80 Ramps Intersection**<br>The CIE and construction contractor will be responsible for implementing future improvements at the West Grand Avenue/Frontage Road/I-80 ramps intersection to minimize conflicts and safety hazards between vehicles and Link users. This includes upgrading the marked crosswalk along the south leg of the intersection to be the same width as the Link, installing pedestrian and bicycle signals, and upgrading traffic signal equipment as necessary. This includes installing video detection equipment to accommodate pedestrian and bicycle movement across the intersection. With installation of video detection for both bicyclists and vehicles, the improvements are not projected to degrade automobile LOS at the intersection. | Prior to and during construction | CIE and construction contractor | BATA |

| Environmental Impact Analysis Topic | Mitigation Measures | Timeframe for Implementation | Responsibility for Implementation | Oversight of Implementation |
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| | **Mitigation Measure TR-2: Implement Signal Upgrade and Optimization at West Grand Avenue/Mandela Parkway (northbound) Intersection**<br>The CIE and construction contractor will coordinate with the City of Oakland to implement signal upgrades and optimization at West Grand Avenue/Mandela Parkway (northbound) intersection. This includes modifying the eastbound approach to convert the shared left through lane to a left-turn-only lane, installing protected phasing for the eastbound and westbound left-turn movements, and upgrading traffic signal equipment as necessary to provide bicycle video detection. | Prior to and during construction | CIE and construction contractor | BATA |
| | **Mitigation Measure TR-3: Implement Safety Measures at Bay Bridge Trail Intersection**<br>BATA and the project designer will design the path in the vicinity of the Bay Bridge Trail intersection to provide for safe movement. The CIE and construction contractor will provide directional signage and striping, and potentially provide a bicycle stop sign on the path at the Bay Trail connection. | Prior to and during construction | BATA, project designer, CIE and construction contractor | BATA |
| | **Mitigation Measure TR-4: Implement Pedestrian/Bicycle Safety Measures between Wood Street Parking Lot and Link**<br>Prior to operation, the following pedestrian/bicycle safety measures will be implemented by BATA/Caltrans between the Wood Street parking lot and the Link.<br>● BATA and the project designer will identify the preferred pedestrian/bicycle route between the Wood Street parking lot and the Link.<br>● The CIE and construction contractor will install crosswalks, crossing treatments, pedestrian-scale lighting, and wayfinding elements as necessary along the route to guide pedestrians and bicyclists. | Prior to and during construction | BATA, project designer, CIE and construction contractor | BATA |
| | **Mitigation Measure TR-5: Implement Pedestrian/Bicycle Safety Measures along Segment 4 of the Link**<br>During final design, BATA and the project designer will include in the design and the CIE and construction contractor will implement the following bicycle safety measures along the west end of Segment 4 of the Link:<br>● Install warning signs at the curve approaches on Segment 4 where the Link ascends and descends with a switchback curve.<br>● Ensure there are clear lines of sight maintained between path sections and, where practical, provide a wider cross section through the curve area. | Prior to and during construction | BATA, project designer, CIE and construction contractor | BATA |