

Appendix F
Minimization and/or Mitigation Summary

Appendix F Minimization and Mitigation Summary

The proposed project alternatives have been designed to avoid or minimize potential environmental impacts. Mitigation measures are proposed when avoidance and minimization attempts could not fully resolve the impacts. The following tables present standard measures and provisions based on applicable laws, regulations, ordinances and formally adopted City of Los Angeles standards to minimize project effects (Table 1) and specific mitigation measures (Table 2).

**Table 1
Standard Measures under Applicable Laws, Regulations, and Adopted City
Standards to be Incorporated into Bid and Specification Package**

No.	Standard Measures	Impacted Resources
1	Continue the outreach program to keep residents, businesses, and any service providers within the area informed, and to inform surrounding communities about the project construction schedule, relocation plans and assistance programs, traffic-impacted areas and the Traffic Management Plan (TMP), and other relevant project information.	Community Impacts
2	Compensate the private parking owners for the loss of any private parking spaces through the right-of-way (ROW) acquisition process.	Community Impacts
3	Provide assistance to local businesses within the project limits to the extent allowed by laws and regulations in the event permanent property acquisitions or temporary business closures result from project construction.	Community Impacts
4	Coordinate closely with the railroad owners or their representatives during the design phase of the project to ensure that the final designs are reviewed and approved by respective railroad authorities.	Utility Impacts
5	Obtain a construction license agreement with respective railroad authorities for construction within the railroad ROW prior to start of construction. Coordinate with railroad representatives during the construction phase to minimize interruption to railroad operations.	Utility Impacts
6	Prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and Monitoring program. The SWPPP would include erosion and sediment control; non-stormwater management; post-construction stormwater management; waste management and disposal; maintenance, inspection, and repair of Best Management Practices (BMPs); employee training to perform inspections of the BMPs at the construction site; and a sampling and analysis plan for contaminated storm runoff. The SWPPP would describe both structural and nonstructural BMPs to minimize or eliminate the potential for spills and leakage of construction materials and erosion of disturbed areas by water and wind.	Water Quality
7	Require the construction contractor to conduct soil profiling (in particular, but not limited to, metals and aerially deposited lead [ADL]) while handling soil at the project site during construction. If the soil contains contaminant concentrations that meet the definition of hazardous materials, then the contractor would be required to adhere to City Standard Specifications (known as the Greenbook), which address the management of various hazardous materials and wastes and that is consistent with the federal and state of California requirements pertaining to hazardous materials and wastes management.	Hazards and Hazardous Materials
8.	Require the construction contractor to conduct a survey to screen for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition activities. If ACM is found, then the contractor would comply with the South Coast Air Quality Management District (SCAQMD) Rule 1403 notification and removal processes.	Hazards and Hazardous Materials
9	Require the construction contractor to dispose of any hazardous materials or wastes encountered during demolition and construction according to current regulatory guidelines.	Hazards and Hazardous Materials

**Table 1
Standard Measures under Applicable Laws, Regulations, and Adopted City
Standards to be Incorporated into Bid and Specification Package**

No.	Standard Measures	Impacted Resources
10	Require the construction contractor to obtain a National Pollutant Discharge Elimination System (NPDES) permit for wastewater discharge if there is a potential for dewatering activities at the project site during construction.	Hazards and Hazardous Materials
11	Require the construction contractor to implement PM ₁₀ control by applying measures contained in Tables 1 and 2 of SCAQMD Rule 403.	Air Quality
12	<p>Require the construction contractor to implement the following measures, when feasible, to reduce PM₁₀ and NO_x emissions generated by construction equipment:</p> <ul style="list-style-type: none"> a Water the construction site three times daily, or apply nontoxic soil stabilizers, as needed, to reduce offsite transport of fugitive dust from all unpaved staging areas and unpaved road surfaces. b Properly tune and maintain construction equipment in accordance with manufacturer's specifications. c Keep trucks and vehicles in loading/unloading queues with their engines off when not in use to reduce vehicle emissions. The contractor should phase construction activities to avoid emissions peaks, where feasible, and discontinue work during second-stage smog alerts. d To the extent possible, use construction equipment that is powered by aqueous diesel or alternative fuel sources (e.g., methanol, natural gas, propane). e Where feasible, use diesel oxidation catalyst for heavy-duty construction equipment. 	Air Quality
13	<p>Incorporate the following requirements in the construction specifications:</p> <ul style="list-style-type: none"> a. Use newer equipment with improved noise muffling and ensure that all equipment has the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding). b. Utilize construction methods or equipment that would provide the lowest level of noise and ground vibration impact, such as alternative low-noise pile installation methods. c. Turn off idling equipment. d. Implement a construction noise and/or vibration monitoring program to limit the impacts. e. Comply with all appropriate provisions of the City Noise Ordinance including, but not limited to, the restrictions on hours of construction and mechanical equipment noise levels. f. Limit construction activities to daytime hours. If nighttime construction is necessary, then the proper permits and variances would be obtained. g. Comply with the TMP on construction routes to avoid or minimize impacts on noise-sensitive receptors located in areas of close proximity to the project site. h. Keep noise levels relatively uniform and avoid impulsive noises. i. Keep area residents and businesses informed of the schedule, duration, and progress of the construction to minimize public objections of unavoidable noise. Notify communities in advance of the construction and of the expected temporary noise impacts during the construction period. 	Noise

**Table 2
Proposed Specific Mitigation Measures**

Environmental Factor	Mitigation Measures	
	Alternative 2 – Retrofit	Alternative 3 – Replacement
Community Impacts and Environmental Justice	<ul style="list-style-type: none"> The City of Los Angeles would develop a construction staging plan and TMP in close coordination with members of the Downtown Construction Traffic Management Committee and with agencies or developers responsible for other planned projects in the immediate vicinity of the proposed project to minimize direct and cumulative construction impacts on the community. The TMP would also identify and provide alternate traffic detour routes, bus stops, transit routes and operation hours, pedestrian routes, and residential and commercial access routes to be used during the construction period. 	<ul style="list-style-type: none"> The City of Los Angeles would actively participate in the community planning exercise process to redevelop the vacated area around the 6th Street Viaduct to provide recreational, retail, and cultural, or other amenities. The City of Los Angeles would provide landscape and streetscape improvements to enhance the aesthetics of the affected intersections along the proposed detour routes that could not be mitigated to the less than significant level. The City of Los Angeles would actively participate in implementation of the Los Angeles River Revitalization Master Plan (LARRMP) to improve the area near the 6th Street Viaduct that is compatible within accordance with the Greening Concept features objectives set forth in the Master Plan. The City of Los Angeles would develop a construction staging plan and TMP in close coordination with members of the Downtown Construction Traffic Management Committee and with agencies or developers responsible for other planned projects in the immediate vicinity of the proposed project to minimize direct and cumulative construction impacts on the community. The TMP would also identify and provide alternate traffic detour routes, construction materials hauling routes, bus stops, transit routes and operation hours, pedestrian routes, and residential and commercial access routes to be used during the construction period.
Traffic, Transportation and Pedestrian Facilities	No specific mitigation is required.	<ul style="list-style-type: none"> The City of Los Angeles would install new traffic signals, and connect to Los Angeles City Automated Traffic Surveillance and Control (ATSAC) system at the intersection of 4th Street and I-15 southbound (SB) On-/Off-Ramps/Gertrude Street. The City of Los Angeles would restripe to add an eastbound right-turn lane at the intersection of 4th Street and Soto Street. The City of Los Angeles would provide alternative pedestrian access within the vicinity of the 6th Street Viaduct during the construction period.

**Table 2
Proposed Specific Mitigation Measures**

Environmental Factor	Mitigation Measures	
	Alternative 2 – Retrofit	Alternative 3 – Replacement
Emergency Services	<ul style="list-style-type: none"> • Notify emergency service providers at least 2 weeks in advance of the project construction schedule. Provide detailed information on the construction schedule, roadway closures, traffic detour route maps, and expected congested intersections. • Coordinate with emergency service providers throughout the construction period to notify them of any changes in construction schedule, roadway closures, and detour routes. 	Same as Alternative 2.
Aesthetics and Visual Resources	<ul style="list-style-type: none"> • During the preliminary design stage of the project, the City and Caltrans have been conducting ongoing design workshops with community representatives. 	<ul style="list-style-type: none"> • During the preliminary design stage of the project, the City and Caltrans have been conducting ongoing design workshops with community representatives. • Continue to work with the community for input through a formalized Context Sensitive Solutions process to develop Aesthetic and Urban Design Guidelines for the new structure. • Evaluate benefits to the community of preserving open space created by the project. Work with the community and other stakeholders, including City agencies, in developing the Greening Concept to include open space and park amenities within the community, including the viaduct design for future connections to the river corridor. • Develop bridge architecture to create a Community/ City Gateway – including possible bridge monuments with decorative lighting, parapet wall treatments, decorative fencing/railing and lighting, and abutment/wing walls – to increase the memorability and announce the presence of the bridge. • Texturize and color slope paving and other smooth surfaces to deter graffiti and enhance the bridge aesthetics. • Apply architectural detailing to the retaining walls, including textures, colors, and patterns. Include caps that will provide shadow lines.
Cultural/ Historical Resources	<ul style="list-style-type: none"> • Implement all stipulations and measures to resolve the adverse effect to be developed as part of the executed Memorandum of Agreement (MOA) between the State Historic Preservation Officer (SHPO), City of Los Angeles, and Caltrans. • Establish an Environmental Sensitive Area (ESA) Action Plan, which would include fencing of site no. 19-003683, archaeological and Native American monitoring during ground-disturbing activities, and training of construction workers. 	Same as Alternative 2.

Table 2
Proposed Specific Mitigation Measures

Environmental Factor	Mitigation Measures	
	Alternative 2 – Retrofit	Alternative 3 – Replacement
	<ul style="list-style-type: none"> • Provide a qualified archaeological monitor to be present at the site during excavation of the viaduct footings, building demolition, and all other construction-related excavations. In the event buried cultural materials are encountered during construction, construction would be halted and the discovery area isolated and secured until the archaeologist finishes evaluating the nature and significance of the find. • Provide a Native American monitor(s) to be present at the site during ground-disturbing activities. • If human remains are discovered, then the County coroner must be notified as soon as is reasonably possible (CEQA Section 15064.5). There should be no further site disturbance where the remains were found. If the remains are Native American, then the coroner is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The Commission, pursuant to Section 5097.98 of the Public Resources Code (PRC), would immediately notify those persons it believes to be the Most Likely Descendants (MLDs) of the human remains. Treatment of the remains would be dependent on the views of the MLD. 	
Paleontology	<ul style="list-style-type: none"> • Retain a qualified paleontologist prior to the start of construction to develop and implement a Paleontological Mitigation Plan (PMP). The PMP would include obtaining a written storage agreement with a recognized museum repository; presenting preconstruction meeting instructions for construction personnel on environmental awareness; instructions on fossil remains handling requirements for archival archiving; archival requirements for remains prior to transfer to the repository for permanent storage and maintenance; instructions on fossil remains handling requirements; a discussion of bulk sample requirements of fine-grained sediment from fossiliferous or potentially fossiliferous strata; and preparation of a report summarizing the findings of the work conducted under the PMP. • Provide a paleontological monitor onsite on a full-time basis to inspect new exposures created by earth-moving activities in areas underlain by the older alluvium and at depths greater than 5 ft below current grade for the younger alluvium. • If fossil remains are discovered, then earth-moving activities at the fossil site would be halted or diverted temporarily to allow the monitor to recover the fossil remains. 	Same as Alternative 2.

**Table 2
Proposed Specific Mitigation Measures**

Environmental Factor	Mitigation Measures	
	Alternative 2 – Retrofit	Alternative 3 – Replacement
Biological Resources	<ul style="list-style-type: none"> If construction occurs between February 1 and August 31, conduct a preconstruction survey by a qualified biologist to identify any active nesting or roosting locations. If the biologist finds an active nest within the construction area and determines that it may be impacted, then the biologist would delineate an appropriate buffer zone around the nest depending on the species and the type of construction activity. Any active nests or roosts observed during the survey would be mapped on an aerial photograph. The biologist would serve as a construction monitor during those periods when construction activities occur near active nest or roost areas to ensure that no inadvertent impacts on these nests occur. Results of the preconstruction survey and any subsequent monitoring would be provided to the California Department of Fish and Game (CDFG). 	<ul style="list-style-type: none"> To protect any possible migratory bird nesting activity, avoid removal of non-native ornamental vegetation between September 1 and January 31. If construction occurs between February 1 and August 31, conduct a preconstruction survey by a qualified biologist to identify any active nesting locations. If the biologist finds an active nest within the construction area, then the CDFG biologist would be consulted on how to relocate them to avoid any construction impacts.