

6th Street Viaduct Seismic Improvement Project

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7 – Bridge Nos. 53C-1880 and 53-0595
EA 251200
Federal Project Number 5006 (342)
SCH#2007081005

Final Environmental Impact Report/ Environmental Impact Statement and Section 4(f) Evaluation

VOLUME II – APPENDICES

Prepared by

**State of California Department of Transportation (NEPA Lead Agency)
and
City of Los Angeles (CEQA Lead Agency)**

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



October 2011

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**Appendix A
CEQA Checklist**



CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY
(Article I – City CEQA Guidelines)

Council District: *14* Date: *July 23, 2007*

Lead City Agency: Department of Public Works, Bureau of Engineering

Project Title: **6TH STREET VIADUCT SEISMIC IMPROVEMENT PROJECT**

I. PROJECT DESCRIPTION

A. Location

Project Location

The 6th Street Viaduct (Bridge No. 53C-1880) and Sixth Street Overcrossing (Bridge No. 53-0595) comprise a single structure, which spans a portion of the Hollywood Freeway (US 101), the Los Angeles River, city streets, and numerous railroad tracks. The structure is located in a highly urbanized area just east of downtown and connects the downtown portion of the North Central Community Planning Area with the Boyle Heights Community Planning Area in the City and County of Los Angeles. Figure 1 illustrates the project areas location with respect to the region while Figure 2 is a Vicinity Map.

B. Purpose

Seismic vulnerability studies, completed in 2004 concluded that the viaduct, with its current state of material deterioration and lack of structural detailing exhibits a high vulnerability to failure under a moderate seismic event (an earthquake with a probable return frequency of once every 40 years). The probability that the viaduct would experience significant failure, and possibly collapse as the result of seismic events exceeds 70 percent over 50 years. This vulnerability level is extremely high compared to the normally accepted collapse probability of 5 percent or less over 50 years. The high risk of collapse and continuing concrete deterioration indicates the need for timely corrective action to 1) seismically retrofit vulnerable viaduct and remove all concrete members experiencing ASR or 2) replace the existing viaduct.

The concrete elements of the 6th Street Viaduct are subject to an ongoing chemical reaction, known as *Alkali Silica Reaction (ASR)*, which has led to significant deterioration of the structure and loss of its seismic integrity. This deterioration of the 6th Street Viaduct has been occurring for at least 75 years, despite many efforts to arrest or limit its effect. In the 1940s, two large pylons (decorative towers) at the center river bent were removed because of concerns for public safety due to the poor condition of the concrete. In the late 1980s, the deck of the viaduct was stripped of asphalt, and a waterproof coating applied to the underlying concrete in an attempt to prevent moisture infiltration. In addition, the viaduct has been repeatedly patched using epoxy injection; an activity that has left stains and

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discoloration and caused by the application of a cementitious coating to hide the unsightly honeycomb effect of these repairs. Cracking is once again evident throughout the viaduct, with large cracks and spalling clearly evident on the outer columns.

C. Description

The proposed project would improve response of this critical Los Angeles River crossing to an acceptable standard resulting from a moderate seismic event by either retrofitting the existing structure or replacing the 6th Street Viaduct entirely. Several alternatives were considered during the project development phase of the project. Criteria used to select the alternatives for carrying forward for detailed analysis in the environmental document include construction and maintenance costs, life span of the facility, constructability, historic preservation, community disruption, and structural and operational safety. Based on the results of the preliminary screening analysis, a No Build Alternative and two Build Alternatives will be analyzed in the environmental document. These are briefly described below.

Alternative 1 – No Build: This alternative provides for neither retrofit nor replacement of the 6th Street Viaduct. The ASR deterioration of the structure would continue. The City would provide ongoing maintenance on the viaduct to keep it open to traffic as long as possible, given the ongoing ASR deterioration. The 6th Street Viaduct would maintain a roadway width of 46 feet, which accommodates two travel lanes in each direction with no outside shoulders or median. The unsafe railings would not be improved to acceptable standards.

Alternative 2 – Viaduct Retrofit: The viaduct's columns would be retrofitted with steel casings, and infill walls would be constructed at additional columns and bents. All columns that are currently identified to have "Moderate-Severe" to "Severe" damage ratings would be encased to reduce the possibility of further deterioration. Additionally, the steel casings would be designed to withstand the high level of internal pressure due to ASR-induced lateral dilation of the encased column. Under this retrofit alternative, 76 columns would be encased, of which 26 would utilize 7/8-inch plates and 50 would use 5/8-inch steel plates. The exposed plates, channels, and bars would be concealed by a 6-inch layer of architectural mortar. All exterior columns with "Light" or "Moderate" damage ratings would also be encased to account for future concrete degradation due to ASR. Encasement of all exterior columns would also maintain visual balance and consistency for the retrofitted structure. The interior columns in Bents 1, 4, and 5 would be encased to enhance their shear strength.

Alternative 3 – Viaduct Replacement: The 6th Street Viaduct would be demolished and replaced with a new four-lane structure. Four alignment alternatives have been defined for the purpose of environmental evaluation (Figure 2). Each alignment alternative may be evaluated with multiple bridge types and profiles. Based on public input, the new viaduct may be designed with various use features, but no additional traffic capacity would be provided. The bridge types and profiles for the following alignment options have yet to be determined.

The analysis in this document assumes that, unless otherwise stated, the project would be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards (e.g., *Los Angeles Municipal Code* and Bureau of Engineering *Standard Plans*). Construction would follow the uniform practices established by the Southern California Chapter of the American Public Works Association (e.g., *Standard Specifications for Public Works Construction* and the *Work Area Traffic Control Handbook*) as specifically adapted by the City of Los Angeles (e.g., The City of Los Angeles Department of Public Works *Additions and Amendments to the Standard*

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Specifications For Public Works Construction (AKA "The Brown Book," formerly Standard Plan S-610)).

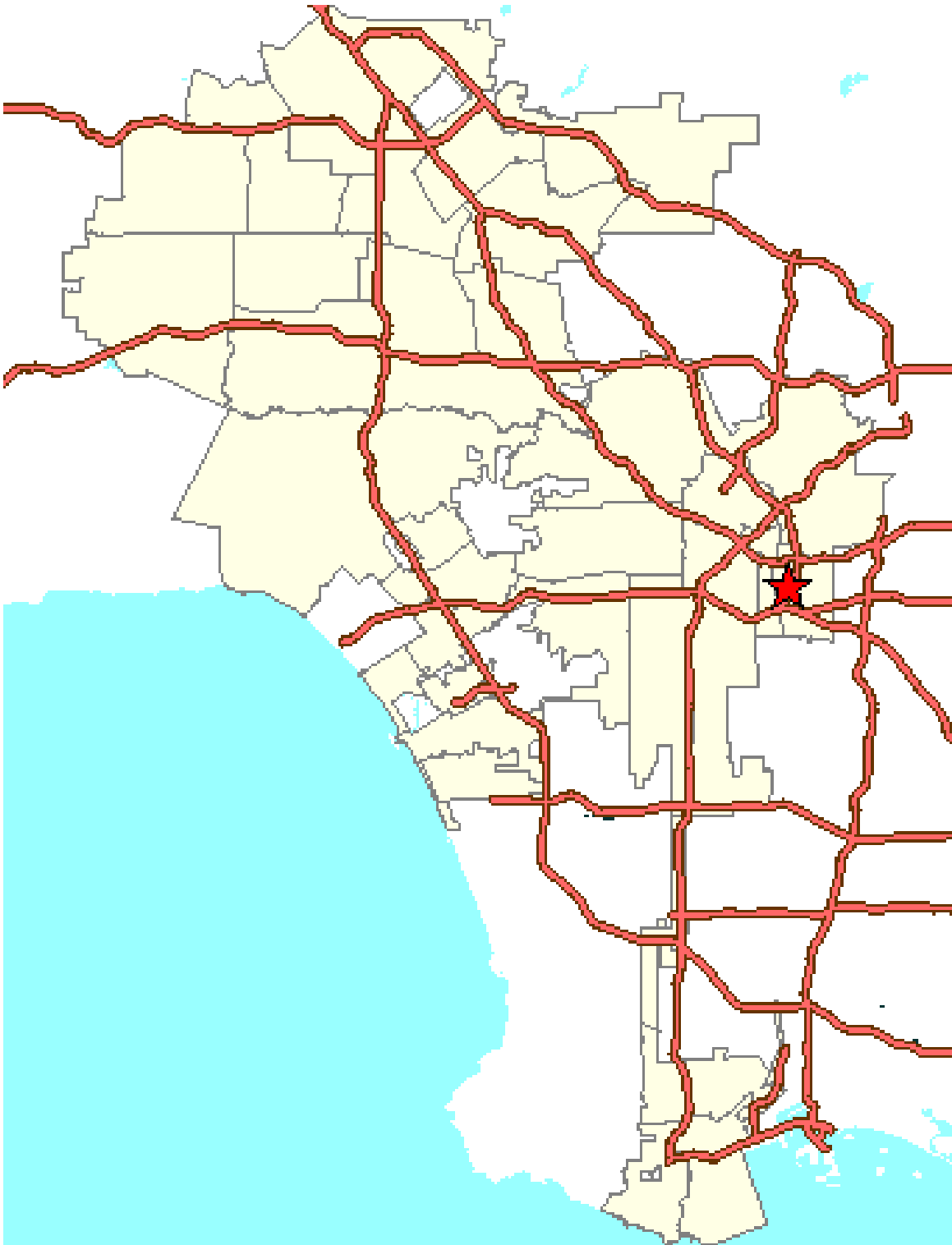


Figure 1. Regional Map



Figure 2. Vicinity Map

II. EXISTING ENVIRONMENT

The proposed project is located within a fully developed, mixed-use urban setting. The active construction zone would extend along 6th Street from west of I-5 on the east side of the Los Angeles River to Mill Street on the west side of the River (see Figure 2). The project is located at the boundary of the City of Los Angeles' Central City North and Boyle Heights General Plan Areas. 6th Street is one of the primary thoroughfares connecting downtown Los Angeles and Boyle Heights.

The 6th Street Viaduct crosses the Los Angeles River along an east-west alignment. Land uses along the north and south sides of the viaduct are predominantly industrial and commercial. The City maintenance office is located within the area underneath the viaduct on the west side of the river. Many homeless people are typically found sheltering under the viaduct on both sides of the river. A US Army Corps of Engineers tunnel is located under the viaduct on the west side to access the river.

In addition to the existing uses mentioned above, the Metropolitan Transit Authority (MTA) also owns a right-of-way corridor on the east and west banks of the river. On the west bank, the two tracks closest to the river are owned by MTA and used by the Southern California Regional Rail Authority (SCRRRA) to operate Metrolink trains. The five tracks west of the MTA tracks are owned by Burlington Northern Santa Fe (BNSF), and the rest of the tracks are owned by MTA and used for the Metro Red Line. Amtrak and BNSF also operate trains on MTA's two tracks on the west bank. On the east bank, the two tracks closest to the river are owned by MTA, and the Union Pacific Railroad (UP RR) owns the rest of the tracks. UPRR also operates trains on MTA's tracks.

The Los Angeles River, which crosses under the viaduct in a north-south direction, is a trapezoidal concrete-lined channel. The Los Angeles River is a flood control channel that receives stormwater

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runoff from its 834-square-mile watershed, treated effluent from two wastewater treatment plants, and some rising groundwater (in the Glendale Narrows area). The river discharges to an estuary in Queensway Bay in the Long Beach Harbor. High voltage transmission lines are located along each bank of the river and cross over the viaduct

III. ENVIRONMENTAL IMPACT EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

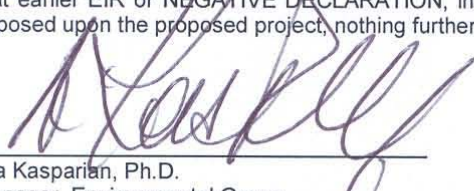
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist, which follows.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" on the environment and that an ENVIRONMENTAL IMPACT REPORT is required.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Ara Kasparian, Ph.D.
Manager, Environmental Group
City of Los Angeles Department of Public Works
Bureau of Engineering

Date

7/25/07

ENVIRONMENTAL ANALYSIS AND DISCUSSION OF IMPACTS

I. AESTHETICS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

The 6th Street Viaduct is a historic resource and is recognized as a visual landmark to the communities in the surrounding area as well as the general public within the City of Los Angeles. Implementation of any of the project alternatives would result in some degree of adverse impact to the visual character of the existing viaduct. The Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed project would evaluate the visual and aesthetic impacts to scenic resources and the affected viewshed, and it would identify feasible mitigation measures to reduce any identified significant impact to a less than significant level.

II. AGRICULTURAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Discussion:

The proposed project is situated in a fully urbanized area that is devoid of farmland or agricultural operations.

III. AIR QUALITY

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emission which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

The proposed project is located in the South Coast Air Basin, which is in non -attainment for ozone and small particulate materials. Construction of the propose d project would marginally increase the emission of these air contaminants as a result of operating construction equipment; clearing of debris and asphalt; onsite excavation and grading; and transportation of demolition debris and excavated material to offsite disposal locations. The EIS/EIR will evaluate potential impacts to local and regional air quality, and identify measures to reduce potentially significant impacts to a less than significant level, as applicable.

IV. BIOLOGICAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project site is located within an urbanized industrial area of the City of Los Angeles and does not contain any significant biological resources, including riparian habitats, wetland, or protected trees. The project would not affect any biological resources. No further study is required.

V. CULTURAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Discussion:

The 6th Street Viaduct was built in 1932 and is 75 years old. According to the Caltrans Historic Bridge Inventory, the Viaduct is rated “2 – Eligible for listing by the National Register of Historic Places (NRHP).” Therefore, it is also included in the California Register of Historic Resources (California Register). In addition, several structures more than 50 years of age are located within the proposed project’s area of potential effects. These structures will be evaluated and documented in the EIS/EIR.

A full Section 106 (of the National Historic Preservation Act) review, in consultation with the City of Los Angeles Cultural Heritage Commission, Los Angeles Conservancy, State Historic Preservation Officer (SHPO), Caltrans, and FHWA would be conducted as part of the EIS/EIR for this project. The Section 106 review would identify both archaeological and architectural historic resources subject to impact by the proposed project. The work would be done in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, under the stipulations of a Memorandum of Agreement (MOA) to be entered into between FHWA, SHPO, Caltrans, and the City of Los Angeles as a result of Section 106 consultation.

VI. GEOLOGY AND SOILS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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iii) Seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b. Result in substantial soil erosion or the loss of topsoil?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The proposed project would be located in Southern California, an area known to be seismically active and prone to earthquakes, which may result in hazardous conditions to people and property within the region. The existing 6th Street Viaduct's vulnerability to extensive damage as a result of a moderate event is the principal concern for undertaking the proposed project. The proposed project would be designed to meet seismic requirements of the local, state, and federal agencies governing the project.

Short-term erosion impacts could occur during the construction phase of the project. During grading, excavation, and other site preparation activities, unearthed and exposed soil could potentially be eroded. Implementation of standard erosion control would minimize the impacts to a less than significant level.

The EIS/EIR would address potentially significant impacts associated with seismic and short-term erosion impacts. Mitigation measures to reduce the identified significant impacts to a less than significant level would be provided.

VII. HAZARDS AND HAZARDOUS MATERIALS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project site is characterized by industrial and commercial land uses. A potential to encounter hazardous wastes/materials exists within the proposed project’s footprint. An Initial Site Assessment (ISA) was conducted along the viaduct corridor within the project limits to identify any hazardous waste or material sites or any potentially contaminated areas listed by federal, state, and local agencies (Parsons, 2007). Based on the ASTM E 1527 -00 standard search distances, 183 sites were identified in the database. Only one of these sites has been determined to present a Recognized Environmental Condition (REC) having the potential to cause soil and/or groundwater contamination.

The viaduct and appurtenances may include asbestos -containing materials (ACM), and portions of the viaduct structure may have previously been treated with lead -based paint (LBP) coatings that would be disturbed by demolition. Unpaved soils adjacent to roadway surfaces within the project corridor (e.g., US 101) may contain aerially deposited lead (ADL).

A site investigation would be conducted during the engineering design phase of the project to confirm the extent of impact and to identify the appropriate mitigation measures. The result of the site investigation would be presented in the EIS/EIR.

The proposed project is situated within a heavy traffic area near downtown Los Angeles. Construction activities related to the proposed project would require traffic lane closures, which would be likely to interfere with traffic flows. Emergency response and evacuation plans that use affected roadways would be impacted in the short term. Implementation of a Traffic Management Plan (TMP) would be required to minimize the impacts to a less than significant level.

The EIS/EIR would discuss potential impacts associated with hazardous waste and materials, including interference with emergency response plans because of project construction. Mitigation measures to minimize these construction phase impacts to a less than significant level would be identified.

VIII. HYDROLOGY AND WATER QUALITY

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year floodplain structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunamis, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The 6th Street Viaduct crosses the Los Angeles River through a section that is concrete lined and fully channelized. The proposed project would involve some work in the channel to either retrofit, remove or reconstruct existing piers, depending on the alternative selected. A n hydraulic analysis would be conducted to assess the impact to the river flow and floodway elevation within the channel.

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The City of Los Angeles in cooperation with the California Department of Fish and Game (CDFG), the Regional Water Quality Control Board Los Angeles Region (RWQCB), United States Army Corps of Engineers Los Angeles District (USACE), and Caltrans District 7, has developed a classification system and menu of Construction Best Management Practices (BMPs) to address the potential for bridge construction projects to harm waterways. Adherence to the approved BMPs would ensure impacts to water resources are minimized to the level of less than significant.

IX. LAND USE AND PLANNING

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project is located at the boundary of the City of Los Angeles Central City North and Boyle Heights General Plan Areas.

Within the Central City North Community Plan Area, the project site is located in the South Industrial Area, one of the major industrial districts within the City of Los Angeles. The South Industrial Area is located between Alameda Street and the Los Angeles River, and between 3rd Street and US 101. Preservation of industrial land use designations is a main objective of the Central City North Community Plan. The project area is also located in the Artists -in-Residence District, which is situated between the Santa Ana Freeway and Santa Monica Freeway and between Alameda Street and the Los Angeles River. Although the largest concentration of artists' residences is located outside of the project area between 1st Street and Palmetto Street and Alameda Street and the Los Angeles River, they are not restricted to those boundaries and may be encountered in the project area.

The Boyle Heights Community, situated east of the river, was developed as one of the first residential suburbs in Los Angeles when rail and rail -related uses began to expand and dominate the Los Angeles River corridor. would Immigrants and residents employed by the railroads and related industrial sectors settled in the Boyle Heights area. Moreover, some of the first public housing projects were constructed in Boyle Heights.

The Community Redevelopment Agency of Los Angeles (CRA) has two redevelopment projects in the project area including the Central Industrial Redevelopment Project and the Adelante Eastside Redevelopment Project. The Central Industrial Redevelopment Project is located in the western portion of the project site. The Adelante Eastside Redevelopment Project is located in the eastern

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portion of the project site. The redevelopment projects are to revitalize the area, eliminate blight, and preserve industrial and commercial uses.

The Los Angeles River Revitalization Master Plan (LARRMP) is the conceptual framework to guide the revival of the Los Angeles River corridor. The 32 -mile-long and one-mile-wide river plan spans from the area of Topanga Canyon east to River Glen and South to around Washington Boulevard. The plan is currently in the Draft Programmatic EIR/Programmatic EIS stage of the environmental process.

The project area lies within the “Downtown Industrial opportunity area,” one of the five demonstration areas of the LARRMP. Two alternatives were considered for the development of the opportunity area : the DI-A and DI-B concepts. Both DI-A and DI-B designate 6th Street in the project area as a Primary Arterial Green Street. The alternatives also propose an expanded multi-use and bicycle trail on the western bank of the Los Angeles River, and a promenade along the eastern bank of the river, each having its own underpass beneath the 6th Street Viaduct. In addition, both alternatives provide pedestrian bridge access ramps from the west side of 6th Street north to the proposed expanded trail. Alternative DI-A designates the eastern portion of the project area on 6th Street as a *Neighborhood Gateway*, while Alternative DI-B establishes the eastern side of the project area as a *Regional Gateway*.

Since the proposed project may facilitate development of the area surround the existing viaduct, the EIS/EIR would evaluate the compatibility of the proposed project development with various land use plans, policies and zoning within the project area.

X. MINERAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally -important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The proposed project is located in a highly urbanized area of the City of Los Angeles. No mineral resources that would be of value to the region or residents of the state have been identified in the vicinity of the project site. The State Department of Conservation has not designated the project site as a Significant Mineral Aggregate Resources Area; thus, no impacts resulting from the loss of mineral resources are anticipated.

XI. NOISE

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Construction of the replacement alternative would require demolition of the existing viaduct and construction of the new structure, which could take up to 4 years. Ambient noise levels may temporarily increase when construction equipment is operating. Ground-borne vibration as a result of the new viaduct structure construction could also occur, potentially during the foundation construction phase. In addition, residents, businesses, and the general public along the designated traffic detour and material hauling routes could experience higher noise levels and ground-borne vibration during the construction period. The project would fully comply with the City's noise ordinance or require a permit from the Police Commission. The EIS/EIR would analyze noise impacts as a result of project construction and identify appropriate mitigation measures to minimize the project impacts.

Following construction, the proposed project is not expected to elevate ambient noise levels because the project would not cause and increase in traffic volumes along the viaduct corridor.

XII. POPULATION AND HOUSING

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project would not have any growth-inducing effects and would not result in the extension of roads or other infrastructure. The project would require some right-of-way acquisition, the extent of which would depend on the alignment alternative to be selected. The areas to be potentially acquired are mostly industrial and businesses. No residential relocation is anticipated. The EIS/EIR would address the right-of-way acquisition impacts and any necessary relocations within the project limits. Environmental justice impacts would also be addressed in the EIS/EIR. Mitigation measures to minimize the impacts to a less than significant level would be identified.

XIII. PUBLIC SERVICES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Discussion:

The proposed project would not require additional police and fire protection or generate a need for new police or fire facilities in the area.

XIV. RECREATION

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project would not generate any additional population; therefore, it would not increase demand for neighborhood or regional parks or other recreational facilities. No impacts to parks or other recreational facilities are anticipated. The project could possibly be designed to enhance the area surrounding the viaduct for recreational purposes and to be in compatible with the Los Angeles River Revitalization Plan. This aspect of the project could be considered a benefit to the community and the region. This opportunity would be addressed in the EIS/EIR.

XV. TRANSPORTATION/TRAFFIC

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

In the event the replacement alternative is selected, the viaduct would be closed for demolition and construction for a period of up to four years. Traffic normally going across 6th Street and the viaduct would have to be rerouted to designated detour routes during this period. The impact from traffic rerouting, including parking loss, during this long construction duration would have to be addressed and mitigation measures identified.

The proposed project would not increase the traffic lanes on the viaduct or the 6th Street approaches. Once the project is in operation, there would be no change in traffic capacity and level of service within the local or regional networks related to the viaduct construction.

XVI UTILITIES AND SERVICE SYSTEMS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Discussion:

The proposed project would not require additional utility or service systems.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

The project site is presently developed and devoid of significant fish, wild life, and/or plant populations. Construction activities would not degrade or have adverse impacts on the natural environment. If the replacement alternative is selected the historic viaduct would have to be demolished, or if it is retrofitted the viaduct would be substantially modified. The 6th Street Viaduct has been identified as eligible for listing on the NRHP and is also included in the California Register. In addition, several buildings within the vicinity of the viaduct that may be subject to right-of-way acquisition are more than 50 years old. These building are subject to evaluation to determine their historical significance. The EIS/EIR would provide further analysis of impacts on historic resources within the project limits and would identify possible mitigation.

Several known and foreseeable projects are planned within the vicinity of the project area. The EIS/EIR would identify all related projects in the immediate vicinity of the proposed project and analyze them for potential cumulative effects. Mitigation measures to reduce potentially significant adverse cumulative impacts would be identified and presented in the EIS/EIR.

XVIII. REFERENCES

City of Los Angeles, 2007. Draft Programmatic Environmental Impact Report/Programmatic Environmental Statement for the Los Angeles River Revitalization Master Plan. January. 2000.

Central City North Community Plan. December. 1998

Boyle Heights Community Plan. November. 1998

L.A. CEQA Threshold Guide. 2006

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City of Los Angeles Bureau of Engineering, 2006. Preliminary Environmental Study, 6th Street Viaduct Seismic Improvement Project. March 2006

Parsons, 2007. Initial Site Assessment, 6th Street Viaduct Seismic Improvement Project. February. 2006

Appendix B1
Resources Evaluated Relative to the Requirements of Section 4(f)

Appendix B1 Resources Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreation areas, wildlife refuges and historic sites located within or adjacent to the project area that do not trigger Section 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not historic sites eligible for the National Register of Historic Places (NRHP), 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

As discussed in detail in Appendix B2, a constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (e.g., noise, vibration, visual, and/or access) so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are “substantially impaired.”

4th Street Viaduct

Fourth Street Viaduct (Bridge No. 53C0044) is a concrete arch bridge over the Los Angeles River, located approximately 0.2-mile north of the 6th Street Viaduct (see Figure 1). Designed by Merrill Butler, the 4th Street Viaduct was built in 1930 and is eligible for the NRHP. The viaduct not only provides a major link between the Downtown Los Angeles and the Boyle Heights Community, but also a thoroughfare for the motorists coming into Downtown Los Angeles from other areas. The average daily traffic along the 4th Street Viaduct is approximately 31,000.

Construction of the 6th Street Viaduct Seismic Improvement Project would not require permanent incorporation (direct use) of the 4th Street Viaduct. However, a portion of the daily traffic now using the 6th Street Viaduct would detour to the 4th Street Viaduct during closure of 6th Street Viaduct for demolition and construction. Based on the project traffic analysis report (October 2008),¹ approximately 26 percent of AM (350 vehicles) and PM (98 vehicles) peak-hour westbound traffic would divert over the 4th Street Viaduct, and 25 percent of AM (39 vehicles) and 30 percent of PM (157 vehicles) peak-hour eastbound traffic would divert over the 4th Street Viaduct (see EIR/EIS Figures 3.7-5 and 3.7-6, and Traffic Analysis Report Figures 7A and 9A). Peak-hour levels of service (LOS) along 4th Street would be substantially impacted at seven intersections, the closest to the viaduct being at the 4th Street/US 101 southbound on-/off-ramp and the northbound off-ramp intersections (see Tables 3.7-6 and 3.7-7, and Figure 3.7-7); this impact was determined to be unavoidable (see Section 3.7.3.1). The intersections east and west

¹ Traffic Analysis Report for 6th Street Viaduct Seismic Improvement Project, 2008.



Figure 1 Location of Section 4(f) Properties in Relation to Project Limits

of the viaduct would only be impacted during the AM and PM peak hour, primarily affecting access to Downtown Los Angeles and US 101, and would not substantially diminish the 4th Street Viaduct's utility. Traffic noise to be generated by the detour traffic would be temporary and would not be substantial (1 to 2 dBA) compared to the ambient noise level (see Section 3.16.3.1). No visual impacts from the proposed project alternatives to the project vicinity area, including 4th Street Viaduct, were identified. Furthermore, no obstruction to the access of the 4th Street Viaduct from the proposed project alternative would occur. Therefore, implementation of the proposed project would not cause constructive use of the 4th Street Viaduct because the proximity impacts would not substantially impair the protected features or attributes of the historic viaduct.

7th Street Bridge

Seventh Street Viaduct, also designed by Merrill Butler, is a reinforced concrete arch bridge of three 80-foot clear spans constructed in 1908-1910. It is located along 7th Street over the Los Angeles River, approximately 0.22 miles south of the 6th Street Viaduct (see Figure 1). Seventh Street is a principal cross-town street in Los Angeles, both to the east and the west of the business center. The average daily traffic along the 7th Street Viaduct is approximately 25,000.

Construction of the 6th Street Viaduct would not require physical alteration (direct use) of the 7th Street Viaduct. However, a portion of the daily traffic now using the 6th Street Viaduct would detour to the 7th Street Viaduct during closure of 6th Street Viaduct for demolition and construction. Based on the project traffic analysis report (October 2008), approximately 68 percent of AM and 70 percent of PM peak-hour westbound traffic would divert to the 7th Street Bridge, and 66 percent of AM and 64 percent of PM peak-hour eastbound traffic would divert (see Figures 3.7-5 and 3.7-6). The resulting peak-hour LOS along 7th Street would be substantially impacted at four intersections, the closest to the bridge being at the 7th Street and Santa Fe Avenue intersection (see Tables 3.7-6 and 3.7-7, and Figure 3.7-7). Mitigation measures were not considered feasible at these intersections; therefore, the impacts were determined to be unavoidable (see Section 3.7.3.1). The intersections east and west of the viaduct would only be impacted during the AM and PM peak hours, primarily affecting access to Downtown Los Angeles and US 101, and would not substantially diminish the 7th Street Viaduct's utility. Traffic noise to be generated by the detour traffic would be temporary and would not be substantial (3 dBA) compared to the ambient noise level (see Section 3.16.3.1). No visual impacts from the proposed project alternatives to the project vicinity area, including 7th Street Bridge, were identified. Furthermore, no obstruction to the access of the 7th Street Bridge from the proposed project alternative would occur. Therefore, implementation of the proposed project would not cause a constructive use of the 7th Street Viaduct because the proximity impacts would not substantially impair the protected features or attributes of the historic viaduct.

Archaeological Site – Primary No. 19-003683

The records search conducted for the proposed project indicated that approximately 90 percent of the Area of Potential Effects (APE) was previously investigated for archaeological resources, and one historic-era site (19-003683) had been identified within the APE. An archaeological field survey of the proposed project APE was conducted on May 21, 2007. Most of the APE was found to be within existing roadways and/or adjacent to the banks of the Los Angeles River and has been subjected to extensive disturbance. The survey resulted in the re-recording of site 19-003683, though visibility was obscured by the presence of road gravels and cargo containers. Exposed portions of the APE, including portions containing the historic-era archaeological site (19-003683), were traversed on foot. Site 19-003683, consisting of historic period domestic refuse, was found to be located generally south of Jesse Road, east of Mission Road and west of the railroad tracks on the east side of the river.

According to the Archaeological Survey Report prepared for this project:

The site record describes the resource as ‘a diffuse scatter of domestic refuse collected from the north end of the lot. The collection dates from 1880 to 1930+.’ The catalog attached to the site form lists several proveniences that include trenches and demolition areas. No specific associations are noted. Preliminary historic research, by means of the historic Sanborn Fire Insurance maps of the Project APE, indicates the property on which the deposits are located was part of a circa 1906-1951 Los Angeles Furniture Mart. Possibly associated with the deposit is a night and weekend watchman’s house near the center of the Los Angeles Furniture Mart property. No other details of possible associations with the deposit were ascertained.²

Detailed site information concerning artifactual content and location must remain confidential to protect the integrity of this cultural resource.

Per Stipulation VIII.C.3 of the Section 106 Programmatic Agreement (PA) between the ACHP, Federal Highway Administration (FHWA), the State Historic Preservation Officer (SHPO), and Caltrans, “If archaeological properties within an undertaking’s APE are protected from any potential effects by establishment and effective enforcement of an Environmentally Sensitive Area (ESA), the signatories agree that Caltrans may consider such properties to be National Register of Historic Places (NRHP) eligible for the purposes of that undertaking without conducting subsurface testing or surface collection.” Because the archaeology site (Primary No.

² Archaeological Survey Report for the 6th Street Viaduct Improvement Project. July 2008.

19-003683) would be protected by an ESA as described in the HPSR prepared for this project, the resource was determined to be NRHP eligible, and is considered a Section 4(f) resource.

Since archaeological site 19-003683 would be protected from potential impacts through the establishment of an ESA, the project doesn't permanently use the property or hinder its preservation, and proximity impacts do not result in constructive use.

Public Parks and Recreational Areas

Based on information derived from the Community Impact Assessment³ and the Natural Environment Study⁴ prepared for the proposed project, it was determined that there are no public parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance within approximately 0.5-mile of the project alternatives.

The 2010 Bicycle Plan

The City of Los Angeles General Plan Transportation Element 2010 Bicycle Plan, approved by the City Council in March 2011, designates 1,633 miles of bikeway facilities and proposes two new bicycle networks (Citywide and Neighborhood). It designates 6th Street and Whittier Boulevard within the project limits as a bicycle lane. According to the Section 4(f) Policy Paper⁵, if a publicly owned bikeway is primarily used for transportation and is an integral part of the local transportation system, the requirements of Section 4(f) do not apply since such a facility is not considered a recreational area. Because the bikeway along 6th Street/Whittier Boulevard would be a part of the City of Los Angeles transportation system, it would not be subject to Section 4(f) consideration.

Other Section 4(f) Resources

There are no other resources within or adjacent to the 6th Street Viaduct Seismic Improvement Project area that would trigger Section 4(f) protection.

³ Community Impact Assessment for Proposed 6th Street Viaduct Seismic Improvement Project. July 2008, updated May 2011.

⁴ Natural Environment Study (Minimal Impacts) for Proposed 6th Street Viaduct Seismic Improvement Project. June 2008, updated February 2011.

⁵ Section 4(f) Policy Paper, FHWA, Office of Planning, Environment and Realty Project Development Environmental Review March 1, 2005.

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Appendix B2
Section 4(f) Evaluation

Appendix B2 Section 4(f) Evaluation

1. Introduction

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

Applicable technical reports for this Section 4(f) evaluation are as follows:

- Historic Resources Evaluation Report for 6th Street Viaduct Seismic Improvement Project, October 2007
- Archaeological Survey Report for 6th Street Viaduct Seismic Improvement Project, July 31, 2008
- Historic Property Survey Report for 6th Street Viaduct Seismic Improvement Project, October 2007

The above technical studies are incorporated by reference and are available for review at the City of Los Angeles Bureau of Engineering (LABOE) office and Caltrans District 7 office.

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible alternative to using that land; and
- the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If

historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

In general, a Section 4(f) “use” occurs with a Department of Transportation-approved project or program when any of the following conditions are met:

- **Direct Use.** A direct use of a Section 4(f) resource takes place when property is permanently incorporated into a transportation facility (23 Code of Federal Regulations [CFR] Section 774.17). This may occur as a result of partial or full acquisition of a fee simple interest, permanent easements, or temporary easements that exceed regulatory limits noted below.
- **Temporary Occupancy.** A temporary occupancy of a Section 4(f) resource is considered a “use” when it is adverse in terms of the preservationist purposes of the Section 4(f) statute; however, under Federal Highway Administration (FHWA) regulations (23 CFR Section 774.13(d)), a temporary occupancy of property does not constitute a use of a Section 4(f) resource when the following conditions are satisfied.
 - The occupancy must be of temporary duration (i.e., shorter than the period of construction of the project) and not involve a change in ownership of the property.
 - The scope of the work must be minor, with only minimal changes to the Section 4(f) property.
 - There are no permanent adverse physical impacts or interference with the protected activities, features, or attributes of the property.
 - The property being used must be fully restored to a condition that is at least as good as that which existed prior to the project.
 - There must be documented agreement of the appropriate official having jurisdiction over the resource regarding the above conditions.
- **Constructive Use.** A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (i.e., noise, vibration, visual, access, and/or ecological impacts) so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (i.e., “constructive use”).

2. Description of Proposed Project

2.1 Proposed Project

Caltrans and the City of Los Angeles (City) propose to undertake seismic and design improvements to the 6th Street Viaduct over the Los Angeles River (Bridge No. 53C-1880) and

the 6th Street Overcrossing, which includes the US 101 Hollywood Freeway (Bridge No. 53-0595). The 6th Street Viaduct and Overcrossing comprise a single structure located in a highly urbanized area just east of Downtown Los Angeles in the City and County of Los Angeles, California, as shown in Figure 1. This historic structure, constructed in 1932, spans a portion of the US 101 Hollywood Freeway, the Los Angeles River, city streets, and several railroad tracks. The project limits extend between Mateo Street on the west side of the river to just east of US 101 on the east side (Figure 2).

The proposed project would correct seismic deficiencies of this critical Los Angeles River crossing by either retrofitting the existing structure or replacing the viaduct entirely. The seismic vulnerability is due to outdated structural design and overall cracking and deterioration of the concrete elements of the viaduct over the last 75 years as a result of an internal chemical reaction called Alkali-Silica Reaction (ASR), as described below in Section 2.3, Purpose and Need, and in detail in Chapter 1 of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The level of damage in various elements of the 6th Street Viaduct due to ASR is shown in Figure 3.

Under the Replacement Alternative, other design (functional) deficiencies of the existing viaduct would be corrected to meet current codes set forth by the American Association of State Highway and Transportation Officials (AASHTO) and the City of Los Angeles Department of Transportation (LADOT). These functional deficiencies include inadequate roadway width (no outside shoulders and substandard sidewalk width), substandard bridge and approach railing (not meeting crash standards), insufficient stopping sight distance along the main span, and lack of a safety median. Nearby roadway, intersection, and adjacent land improvements would also be undertaken. More-detailed information on the proposed project and alternatives, as well as a complete description of the existing viaduct, can be found in Chapter 2, Proposed Project Alternatives, of the EIR/EIS.

2.2 Project Alternatives

Several project alternatives were developed during the project development phases. Screening exercises were conducted to select the most viable alternatives for evaluation in the environmental document.

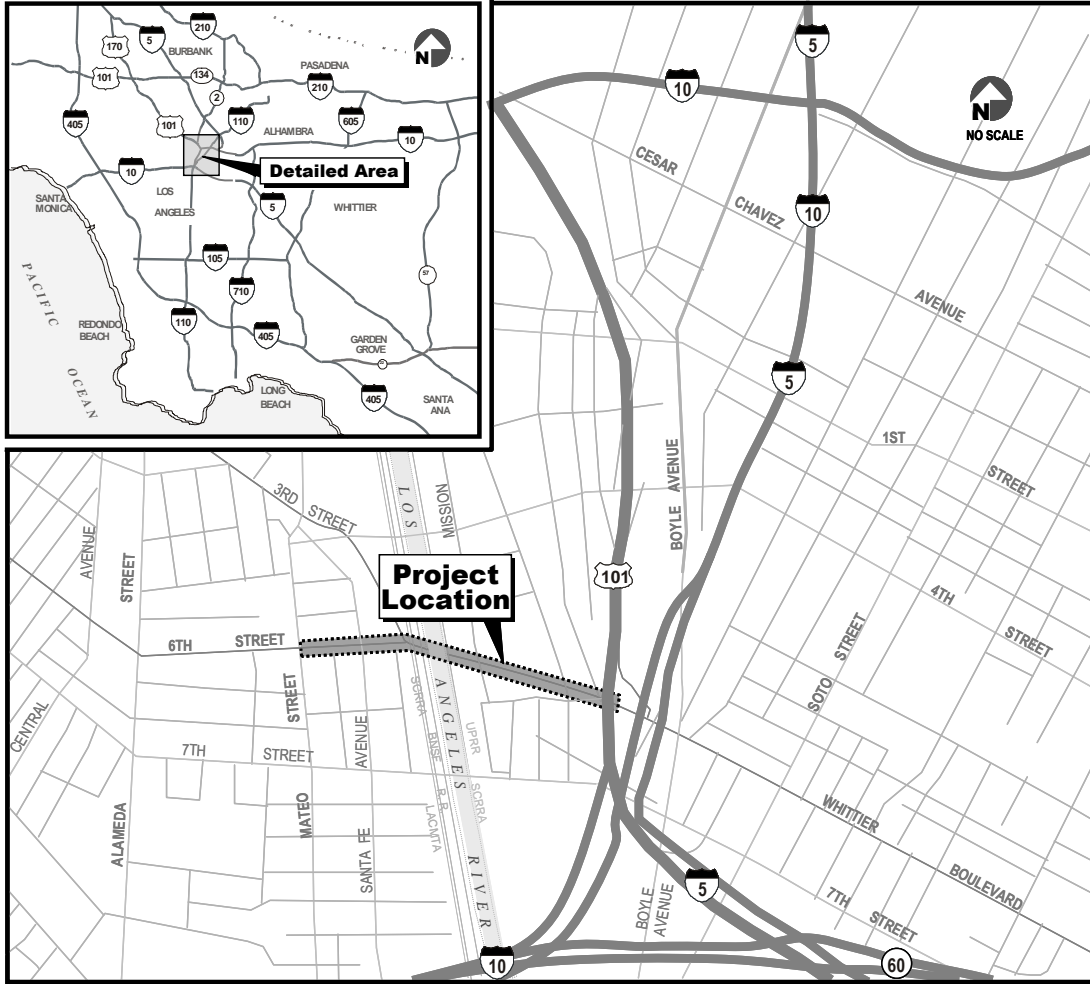


Figure 1 Project Location and Vicinity Maps

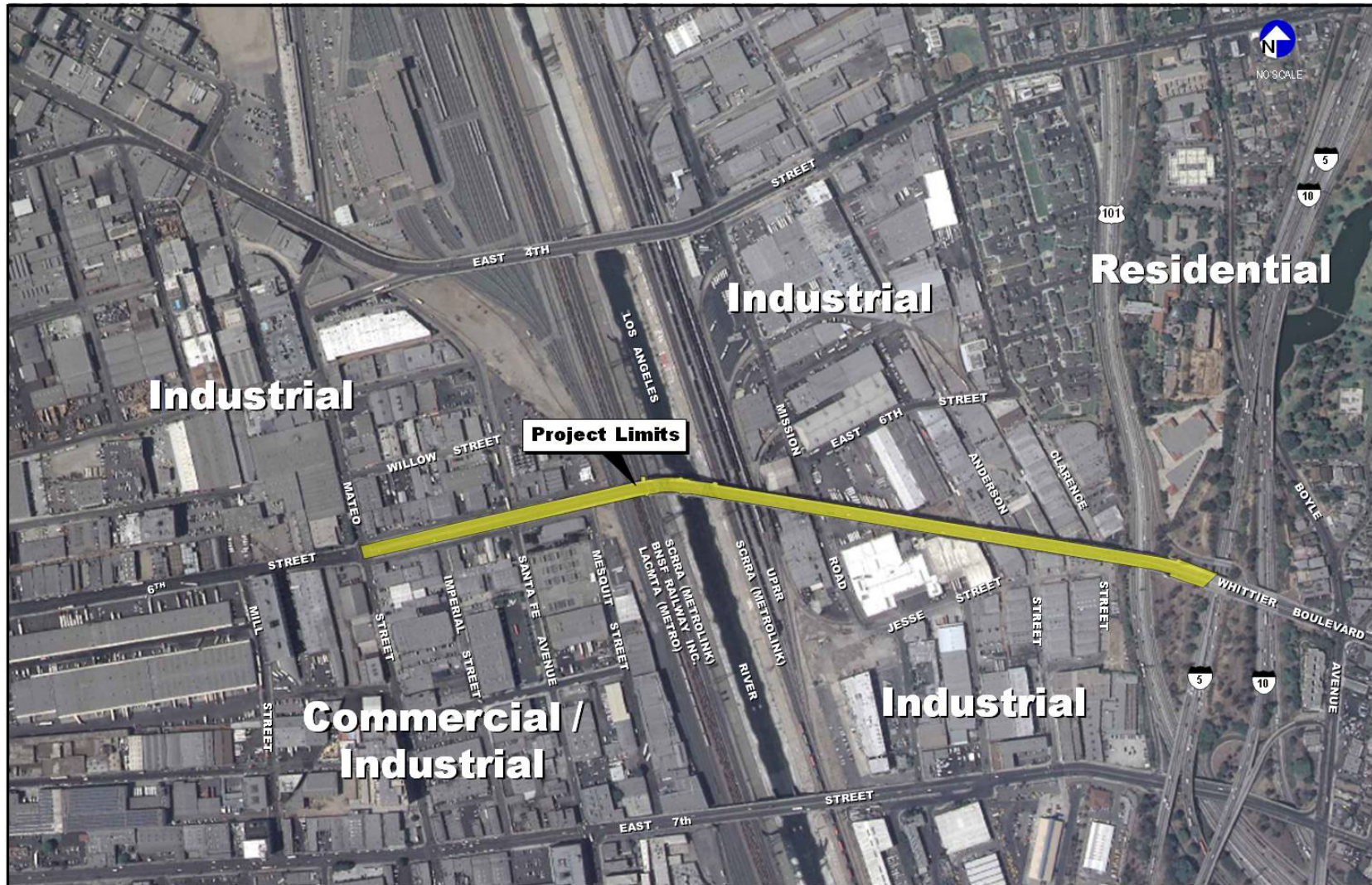


Figure 2 Project Limits

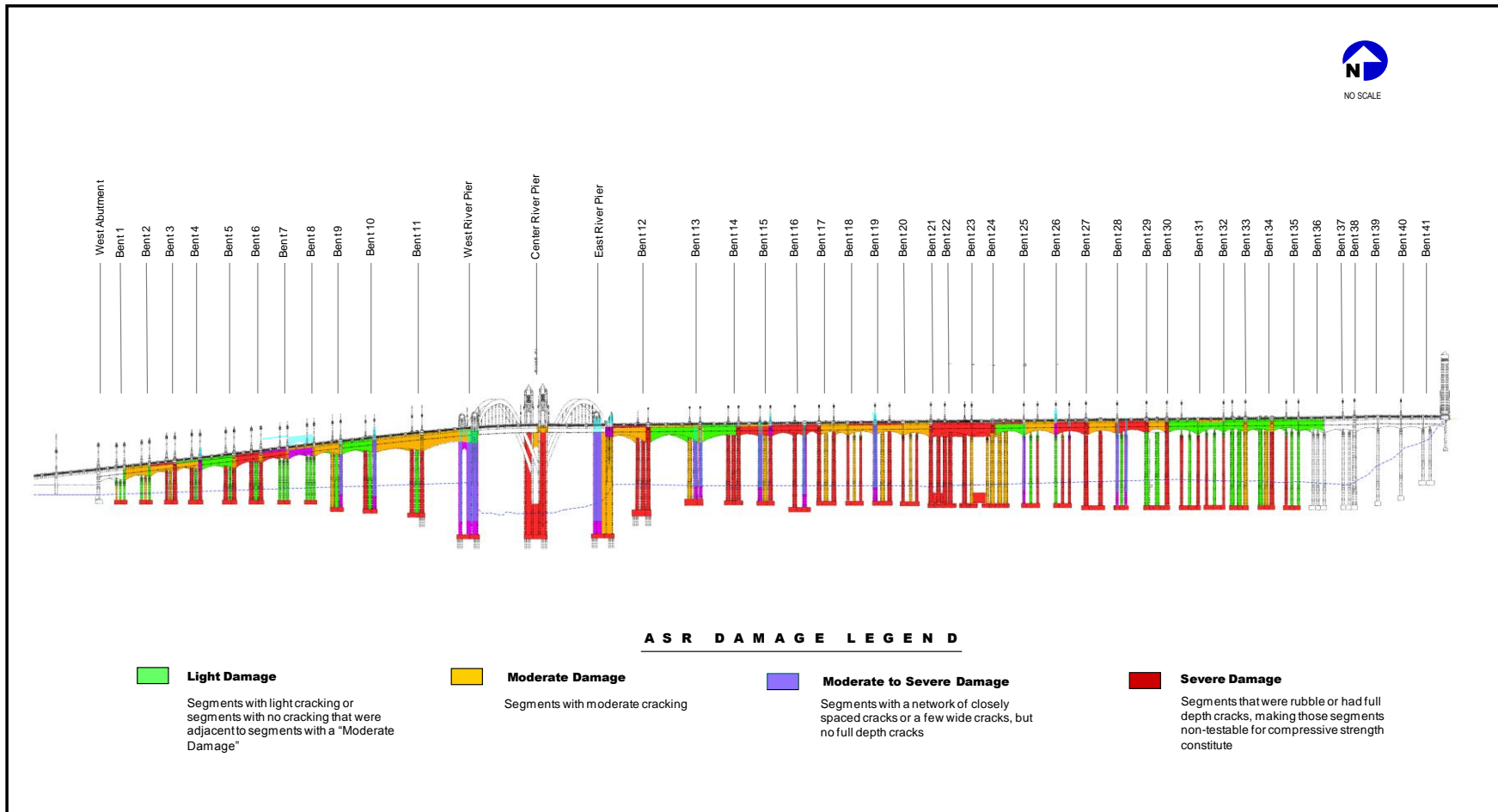


Figure 3 Level of Damage in Various Elements of the 6th Street Viaduct due to ASR

Alternative 1 – No Action

This alternative provides neither retrofit nor replacement of the seismically and functionally deficient 6th Street Viaduct. The ASR-induced deterioration of the structure would continue, and the seismic vulnerabilities would worsen as the concrete strength continued to deteriorate. The City would provide ongoing inspection and maintenance on the viaduct to keep it open to traffic as long as possible, given the ongoing ASR deterioration and seismic vulnerabilities. The 6th Street Viaduct would remain at its existing roadway width of 46 feet (ft), which accommodates two travel lanes in each direction with no outside shoulders or safety median. None of the design deficiencies would be corrected under this alternative.

Under the No Action Alternative, the viaduct may be determined to be unserviceable by the LABOE and Caltrans due to advanced ASR deterioration or a major seismic event in the future, the timing of which neither can be predicted. Under such an event, the City would take the viaduct out of service and seek emergency funding sources to replace it. If this were to occur, it is estimated that the time to secure funding, complete design, acquire right-of-way (ROW), and construct a new viaduct would range between 5 and 7 years from the time it was placed out of service. Since, under those circumstances, the project would be considered an emergency, it would be Exempt by Statute under CEQA (PRC 21080[b]; 14 CCR 15260 et seq.) and a Categorical Exclusion under NEPA (23 U.S.C. 125). No environmental document would be required. It is estimated, based on similar projects, that securing full funding would take up to 1 year, design and right-of-way acquisition would take 1 to 2 years (could be done concurrently with funding), and construction would take approximately 4 years.

Alternative 2 – Viaduct Retrofit

The following subsections provide detailed descriptions of the retrofit scheme (Infill Wall and Heavy Steel Casing Method) selected for environmental analysis.

Under this alternative, the viaduct's columns would be retrofitted by encasing them with steel, and infill walls would be constructed between selected columns. In addition, new foundations, grade beams, retrofitting of bent caps, and closure of some expansion joints in the superstructure would be constructed in combination with the column retrofits. The structure would be retrofitted to the minimal standard of "no collapse" for a major earthquake (a magnitude 7.3 on the Richter Scale).

Column Retrofit

Under this retrofit alternative, 76 columns (out of a total of 114) would be encased, of which 26 would utilize 7/8-inch plates and 50 would utilize 5/8-inch steel plates. A 6-inch layer of architectural mortar would conceal the exposed plates, MC8x18.7 channels, and bars (Figure 4).

All exterior columns with “Light” or “Moderate” damage ratings would also be encased to account for future concrete degradation due to ASR expansion. Encasing all exterior columns would also maintain visual balance and consistency for the retrofitted structure. The interior columns in Bents 1, 4, and 5 would be encased to enhance their shear strengths. Bent 12 would be excluded from retrofitting because of the lack of space available for construction of the column encasement due to proximity of railroad tracks.

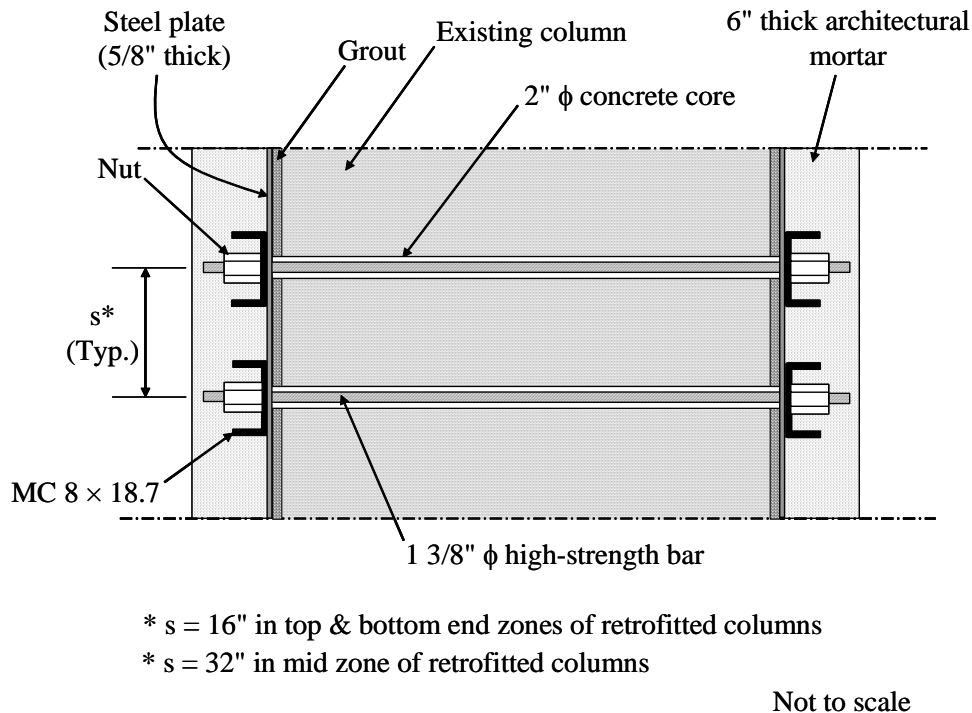


Figure 4 Steel Encasement of Columns

Infill Walls, New Foundations, Grade Beams, and Closure of Expansion Joints

Infill shear walls would be constructed between the columns to reduce transverse seismic movements of the structure. Grade beams would be constructed below ground between the existing pile caps to reduce longitudinal seismic movement of the structure. Along the viaduct (non-river piers), new foundations would be constructed with the placement of new piles around the existing column foundations. To improve stability of the footings, uplift tie-downs (soil anchors) might be required at some columns where there are large uplift demands on the foundations that could result in rocking response and excessive displacements of the superstructure. Expansion joints in the superstructure would be reconstructed at Bents 27 and 33, connecting adjacent spans to reduce seismic longitudinal displacement demands for the East Approach Spans. Figure 5 presents a conceptual sketch of the proposed infill walls and column casings.

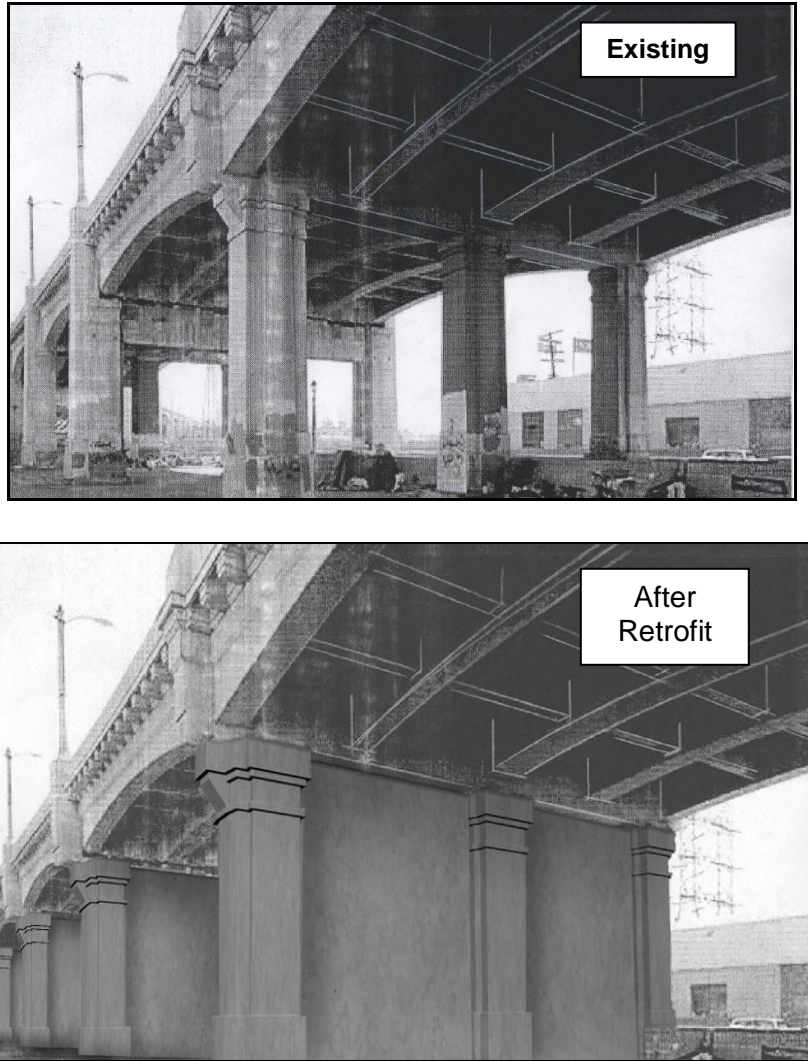


Figure 5 Conceptual Drawing Alternative 2 – Retrofit

Bent Caps Retrofit

Retrofitting of bent caps would ensure that the expected seismic damage would take place in a controlled fashion. Retrofitting of bent caps for flexural strength enhancement is proposed at 16 bents (excluding Bents 27 and 33 where expansion joints would be closed). Bent cap retrofit would be achieved by means of concrete bolsters, which would be bonded to the bent caps by dowels that run through pre-drilled cores in the existing bent cap. Continuity of the concrete bolsters along the length of the bent cap would be achieved by post-tensioning of high-strength bars that would run through pre-drilled cores in the superstructure girders (see Figure 6). The post-tensioning bars would be anchored at their ends by exterior steel plates; these exposed plates and the bars would also be concealed by mortar.

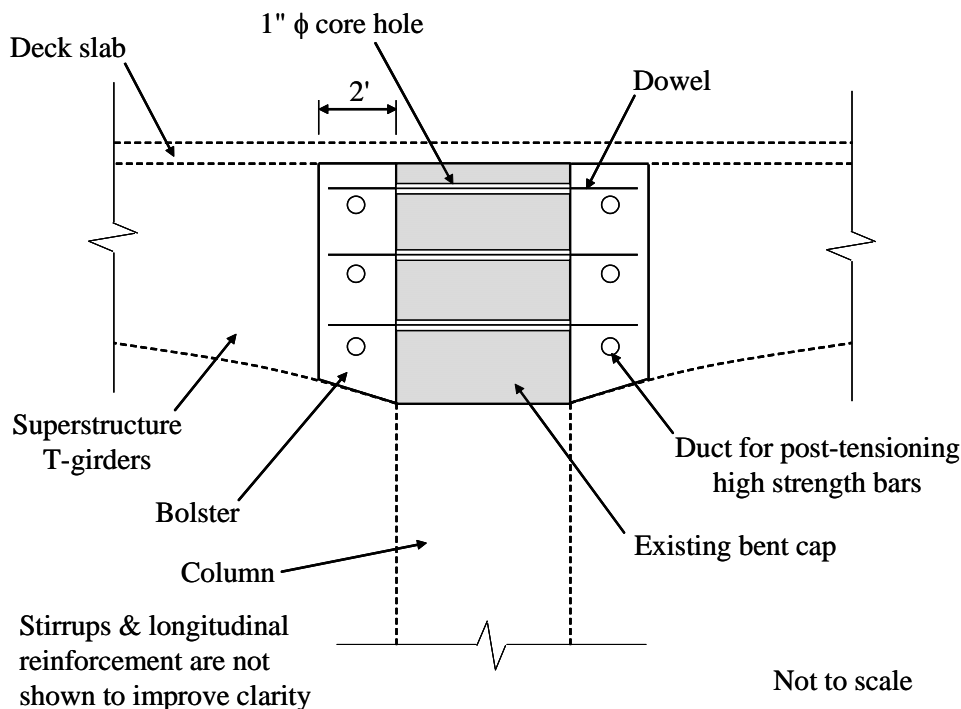


Figure 6 Retrofitting of Bent Caps by Concrete Bolsters

Bent caps at locations of expansion joints would be retrofitted as shown schematically in Figures 7 and 8. The positive flexural moment capacity would be enhanced by adding drop caps at the soffit of the existing bent caps. The new drop caps would be bonded to the existing bent cap by dowels. Steel plates would be placed along the sides of the bent caps and bonded to the concrete by means of high-strength bars inside core holes. The steel plates would enhance flexural capacity and resistance to horizontal shear.

River Piers Retrofit

The river piers would be retrofitted by placing infill walls between columns at the West and East River Piers. In addition, new pile foundations would be constructed around the existing foundations at the West and East River Piers to confine the poor lap-splices of the longitudinal column reinforcement and to allow column bases to develop their full plastic moment capacities.

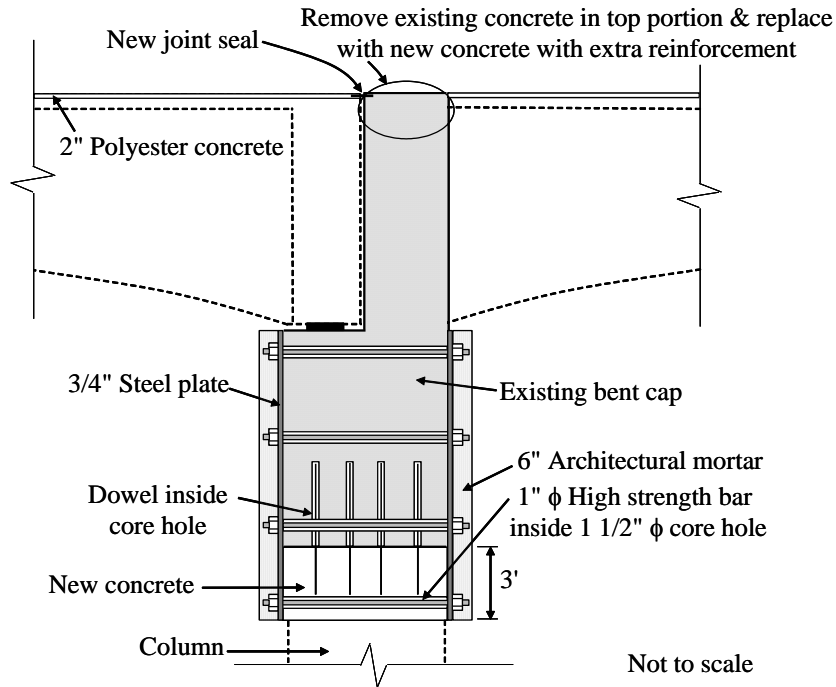


Figure 7 Bent Cap Retrofit at Expansion Joints (one simply supported span)

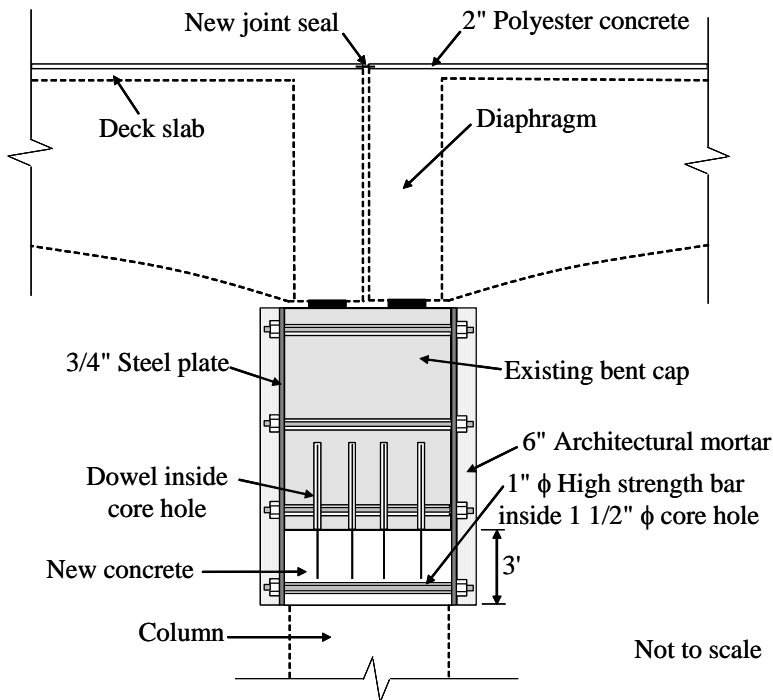


Figure 8 Bent Cap Retrofit at Expansion Joints (two simply supported spans)

New Expansion Joint Seals

Installation of new expansion joint seals is essential for long-term efficiency of the retrofit design because it helps protect the substructure from direct water flow onto concrete membranes. Additional moisture at the concrete surface can accelerate the ASR and subsequent concrete damage. Figures 7 and 8 show the proposed new expansion joint seals.

Design Life

The design life expectancy of Alternative 2 is approximately 30 years.

Alternative 3 – Viaduct Replacement

This alternative would construct a new viaduct along one of the three alignments under study. The main-span bridge type would be selected from one of the five alternatives under consideration. The design life expectancy of Alternative 3 is 75 years

Viaduct Alignments

Three viaduct replacement alignments; (i.e., 3A, 3B, and 3C); out of ten that were evaluated (refer to Appendix N for information on all alternatives evaluated) were selected for design consideration, as shown in Figure 9. These three alignments were evaluated in the Draft EIR/EIS (June 2009). A description of each alignment is provided below.

Alignment 3A: The replacement structure would be built along a new horizontal alignment. The new structure within City's ROW would have a cross section that meets secondary highway standards as required by the City of Los Angeles Department of Transportation (LADOT). The new roadway would have a maximum width of 70 ft (curb-to-curb) and would consist of two 11-ft-wide lanes in each direction, a median with a maximum width of 10 ft, and outside shoulders with a maximum width of 8 ft which would incorporate future bicycle lanes. The proposed cross section would also allow for sidewalks with a maximum width of 10 ft. Bridge rails located on the outside edges of the structure would have a width of 2 ft. The typical width to the outside of the bridge rails would therefore be 94-ft maximum for spans that are not supported on cables. The cross section within Caltrans' ROW (over US 101) would be slightly different. In this section, the viaduct roadway would be 74 ft, curb to curb, consisting of two 12-ft-wide lanes in each direction, a 10-ft-wide median, and 8-ft-wide shoulders. The proposed cross section also allows for 8-ft-wide sidewalks on both sides of the structure.

The new viaduct structure would extend east from Mateo Street to just east of US 101. The new roadway design has a transition on the west side of the river from the existing street width at Mill Street to the ultimate width of the proposed 6th Street Viaduct Replacement Alternative at Mateo Street. Because of the wider viaduct replacement structure, the north side of the viaduct footprint

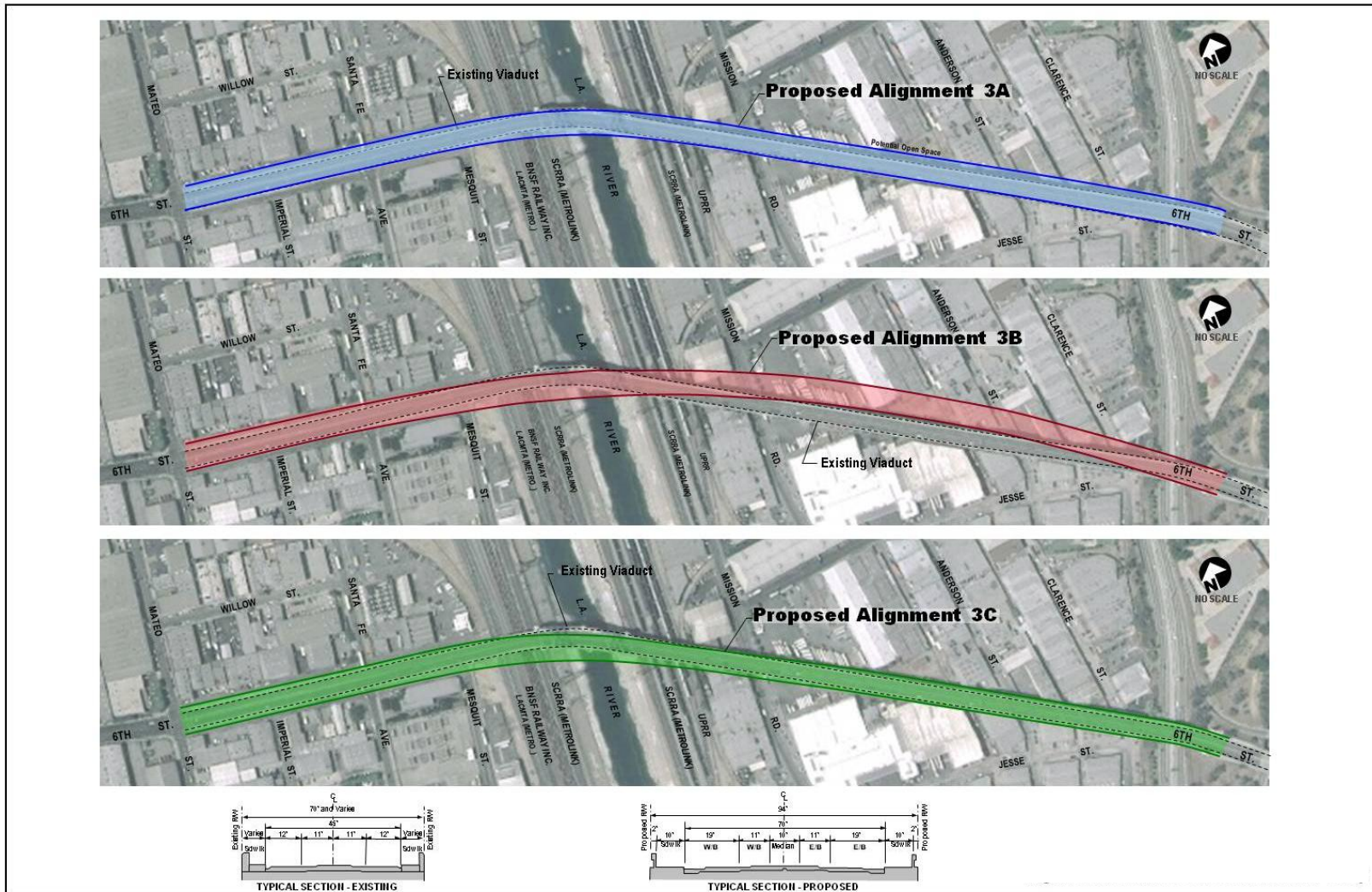


Figure 9 Alignment Alternatives Selected for Further Study

would extend farther to the north, while the south side of the footprint would remain essentially at the same location except for the segment of the alignment over the Los Angeles River, which would be shifted slightly to the south to improve the horizontal curve radius and provide improved safety with better stopping sight distances.

Alignment 3B: The new viaduct would be designed with the same cross section as Alignment 3A. This option proposes a horizontally curved alignment from Santa Fe Avenue to the west of US 101. The curve in the alignment is more gradual than Alignment 3A. This alignment, similar to Alignment 3A, maintains its present location on the south side of the existing bridge from Mateo Street to Santa Fe Avenue, and the alignment shifts to the north from Santa Fe Avenue to the east as it crosses over the river. This alignment would swing to the north approximately 85 ft farther than the existing alignment on the east side of the river, which would eliminate the existing tight radius curve at the east end.

Alignment 3C: The new viaduct would be designed with the same cross section as Alignment 3A. To accommodate the wider viaduct, the footprint of the viaduct would be extended on the north and south sides, except for the area between Mateo Street and Mesquit Street, which would be wider to the north only. The segment that extends from the river to the east would be constructed so that the columns and foundations lie within existing ROW and the viaduct roadway deck extends beyond the existing ROW over adjacent private properties.

Bridge Concepts

Fifteen (15) bridge concepts (types) were developed during the initial phase of the project in the summer of 2007. Based on the Community Advisory Committee (CAC) and technical staff input, these were screened down to five bridge concepts (i.e., Concepts 1, 2, 3, 4, and 5) for further consideration. In spring 2009, refinement of Bridge Concepts 1 and 4 were added as a result of public and agency input. Bridge Concepts 1A and 4A were developed for consideration during the public review period of the Draft EIR/EIS, and they were introduced at the CAC meeting in April 2009 and during the public hearings for the Draft EIR/EIS held in July 2009. Each of the seven bridge concepts, including design expressions 1A and 4A, could be constructed on any of the viaduct replacement alignments (i.e., 3A, 3B, or 3C). The City will refine the final design of the bridge replacement, as a means to ensure an architecturally distinctive and cost-effective structure.

Bridge Concept 1 – Main Span Replication. The new replica bridge could capture the essence of the old landmark bridge with its decorative offset corner elements, similar steel arches, “deco” detailing and offset of planes at the pier walls, and corners with decorative dentil detailing below the concrete barrier along the entire length of the viaduct. The structure could mimic the original design with complimentary dual arches – the suspender elements spring out from the middle of the river pier to the thru-arch buttressing at the river bank piers. The new main center pylon with its belvederes would maintain the pedestrian viewing area of the original 1932-designed belvederes. Also, the central pier, which historically extended above the bridge deck until being removed in the 1950s, could be reintroduced in the replacement structure of Concept 1 (Figure 10).



Figure 10 Computer Model of Bridge Concept 1

Bridge Concept 2 – Cast-in-Place (CIP) Box Girder with Steel Tied Arch Pedestrian Ways. The bridge design of Concept 2 could employ a combination of some of the structural elements proposed for Concept 1 (Figure 11). The main span of the bridge could be a concrete box girder with gateway monuments at each end. In addition, the pedestrian could be separated from the bridge deck at the main span, allowing pedestrians to enjoy a different experience while crossing the bridge.



Figure 11 Computer Model of Bridge Concept 2

Bridge Concept 3 – Steel Half-Through Arch with CIP Box Girder Approaches. The design of Concept 3 could pick up structural elements found on the original half-through arch of the landmark main span (Figure 12). Reaching over the Los Angeles River, the new half-through arches could intersect the bridge deck and nestle into the embankment piers. The lateral tie beams between the arches above the deck could be similar in cross section to that of the arch and vertical structural members of the original bridge.



Figure 12 Computer Model of Bridge Concept 3

Bridge Concept 4 – Extradosed Concrete Box Girder . Bridge Concept 4, a contemporary cable-supported structure, would present a 21st century structural principle that introduces a relatively new technology to the United States. This extradosed concept bridge could invoke a uniquely modern statement over the river. In Bridge Concept 4, the bridge's main span could be composed of a series of dual pylons on the outside of the

roadway that rise above the bridge deck; depicted here are concepts with one set of dual towers (Figure 13) and three sets of dual towers (Figure 14).



Figure 13 Computer Model of Bridge Concept 4

The top of each tower could be illuminated to enhance the nighttime effect of this distinctive structure. The main viewing platforms could sit above the center of the river, and they could be detailed with shapes that are similar in scale to the existing viaduct's belvederes, yet be in concert with the extradosed bridge pylons and piers.



Figure 14 Computer Model of Bridge Concept 4A

Bridge Concept 5 – Extradosed Concrete Box Girder with Single Pylon. Concept 5 is another potential design expression of the extradosed bridge principle. This expression features extradosed structures with towers and cables aligned along the center of the main span and viaduct approaches (Figure 15). This particular expression utilizes six bridge towers as symbolically representative of 6th Street. The top of each tower could be illuminated to enhance the nighttime effect.



Figure 15 Computer Model of Bridge Concept 5

2.3 Project Purpose and Need

A detailed description of the project purpose and need can be found in Chapter 1, Sections 1.4 and 1.5, of the EIR/EIS. In summary, the purpose of the proposed project is to achieve the following objectives:

- Preserve 6th Street as a viable east-west link between Boyle Heights and Downtown Los Angeles
- Reduce vulnerability of the 6th Street Viaduct in major earthquake events
- Resolve design deficiencies of the 6th Street Viaduct

The 6th Street Viaduct was constructed in 1932 using state-of-the-art concrete technology at that time and onsite mixing plants. Over the last 75 years, concrete elements of the viaduct have cracked and deteriorated as a result of ASR. The ongoing ASR has led to significant deterioration of the structure's concrete strength and loss of seismic integrity. This deterioration of the 6th Street Viaduct has been occurring for at least 75 years, despite many efforts to arrest or limit its effect. In the late 1980s, the deck of the viaduct was stripped of asphalt, and a waterproof coating was applied to the underlying concrete in an attempt to minimize moisture infiltration; water is a necessary component for ASR. In addition, the viaduct has been repeatedly patched using epoxy injection, which is a process that has left stains and discoloration and necessitated the application of a cementitious coating to hide the unsightly honeycomb effect of these repairs and to further seal the surface from moisture. Cracking is evident throughout the viaduct, with large cracks and spalling evident on its outer columns.

The proposed project would correct seismic deficiencies of this critical Los Angeles River crossing by either retrofitting the existing structure or replacing the 6th Street Viaduct entirely.

While the deteriorated surface appearance of the viaduct is an issue, its underlying structural integrity is of much greater concern. In 1989, the Whittier Narrows earthquake caused damage to shear keys and caused a column crack at Bent 33. The structure has since been classified by Caltrans as Category I and placed on the mandatory seismic retrofit list.

In the mid 1990s, Caltrans conducted an evaluation of Bridge No. 53-0595, which is the portion of the viaduct owned by Caltrans that crosses US 101. This evaluation determined that seismic retrofit was warranted, and in 1995 Caltrans undertook a retrofit construction project for that portion of the 6th Street Viaduct. The Caltrans seismic retrofit project placed infill walls between existing columns at the bents adjacent to the mainline roadbed, from Bent 37 to the east abutment. While this improvement was consistent with the Category I seismic retrofit program by eliminating potential collapse vulnerabilities, it did not resolve the long-term ASR problem and only improved the state-owned 235-ft-long portion of the 3,500-ft-long viaduct. The City elected to not move forward with a retrofit design similar to the one employed by Caltrans because of concerns that such a strategy did not address the ongoing degradation of the viaduct concrete due to ASR. The ASR deterioration weakens the concrete strength, which results in greater seismic vulnerability over time. ASR damage cannot be reversed after the reaction has taken place within the concrete, and the reaction continues to occur on the viaduct. In late 2000, the City engaged a consultant to conduct a material testing program to determine the strength of the existing concrete and the overall condition of the structure. This extensive material testing and investigation program, which was completed in January 2002, confirmed the presence of severe cracking and low concrete strength throughout the viaduct, and it identified its root cause to be ASR.

The *Final Seismic Retrofit Strategy Report*, which was completed in 2004,⁷ concluded that the viaduct, in its current state of material deterioration and lack of structural strength, has a high vulnerability to failure in a major earthquake. The probability that the viaduct will experience significant structural failure, and possibly collapse, under major seismic events exceeds 70 percent in 50 years. This vulnerability level is extremely high compared to the normally accepted collapse probability of 10 percent or less over 50 years, as defined by AASHTO. The high risk of collapse and continuing concrete

⁷ Sixth Street Viaduct Over the Los Angeles River Final Seismic Retrofit Strategy Report. June 2004.

deterioration indicates the need for timely corrective action to either seismically retrofit the viaduct or replace the viaduct.

In addition to its vulnerability to collapse under predictable seismic forces, the 6th Street Viaduct also has design and operational safety deficiencies issues based on current standards.

The City-owned viaduct (Bridge No. 53C-1880) has a sufficiency rating of 52.4.⁸ Bridges are deemed structurally deficient by the federal government if the deficiency rating is below 80, and therefore eligible for federal funding to correct the deficiency. The purpose of the rating system is to help the federal government determine which bridges need funding for repair or replacement. The major factors contributing to the low sufficiency rating of the structure include:

- Cracking and condition of deck, superstructure, and substructure elements
- Inadequate roadway width
- Out-of-specification bridge and approach railing, and approach rail ends.
- Poor roadway alignment
- Out of specification geometric and seismic detail design

3. Description of Section 4(f) Property

Resources subject to Section 4(f) consideration include publicly owned lands consisting of public park/recreation areas; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned.

The only Section 4(f) property that would be subject to “use” under the proposed project is the 6th Street Viaduct. Other Section 4(f) resources within 0.5-mile from the proposed project have been identified and documented in Appendix B1 because they are not subject to either direct or constructive use. The following paragraphs provide a description of the 6th Street Viaduct.

The inventory and evaluation effort for architectural resources for the project was conducted in 2007.¹² The inventory included survey of buildings, structures, and objects near the viaduct and identified historical resources constructed in or before 1964. Thirty-three (33) properties within the APE were analyzed because they contained individual

⁸ Caltrans. 2006. Bridge Inspection Records Information, Structure Inventory and Appraisal Report, Bridge No. 53C-1880, California Department of Transportation, Structure Maintenance and Investigation. August.

buildings, groups of buildings, structures, groups of structures, and objects that were not eligible for exemption as defined in Attachment 4 of the Section 106 PA.

The one NRHP-eligible historic site in the project APE is the 6th Street Viaduct. Of the Los Angeles River Bridges, 6th Street was the last of the historic Los Angeles River viaducts to be constructed and is transitionally important in that it established the streamline moderne/art deco design principles of the following Works Progress Administration (WPA) bridges. It is classified as steel arch in that its largest spans are twin 150-ft steel through arches. The remainder of the structure, the total span of which is 3,546 ft, comprises T-girder spans. An approximate 3,264-ft-long segment of the viaduct is owned by the City, and the 235-ft-long portion overcrossing US 101 is owned by Caltrans. The structure is located in a highly urbanized area just east of downtown Los Angeles and connects downtown on the west side of the Los Angeles River with the Boyle Heights community on the east side of the river (Figure 16).

Called the “best expression of the modern phase” of the 25-year bridge building program, it is also “the last and grandest of the group.” The 6th Street Viaduct was initiated in 1926 when the City Council voted to acquire property. Upon completion, the 6th Street Viaduct was the longest and largest of the bridges spanning the Los Angeles River. The viaduct officially opened on June 16, 1933, at a cost of \$2,383,271¹³ (Figure 17).

The viaduct’s most distinctive features, other than its length, sheer mass, and exceptional detailing are the twin, parabolic steel through-arches. These arches meet at the center of the Los Angeles River toward the base of the tapered central piers, and diverge east and west, in irregular mirrored shapes. The unusual shape of the arches is emphasized by tapered profiles – each is thicker at the central pier and appears thinnest at the tops of the arches. The arches “pierce” the viaduct deck and terminate gracefully inboard of the decorative balusters, at the crowns of the next piers.

The boundaries of the historic property include the entire bridge: its abutments, bents and piers, all approaches, the deck, all handrails, streetlight standards and luminaires, the tunnel, the steel and concrete arches, the spandrels, and the areas below the decks that contain bridge-related structures. All elements contribute to its historic significance except the replaced streetlight standard luminaires and infilled piers from previous seismic retrofits.¹⁴

¹² Historic Resources Evaluation Report for 6th Street Viaduct Seismic Improvement Project. October 2007.

¹³ Ibid.

¹⁴ Ibid.



Figure 16 Aerial Views of 6th Street Viaduct

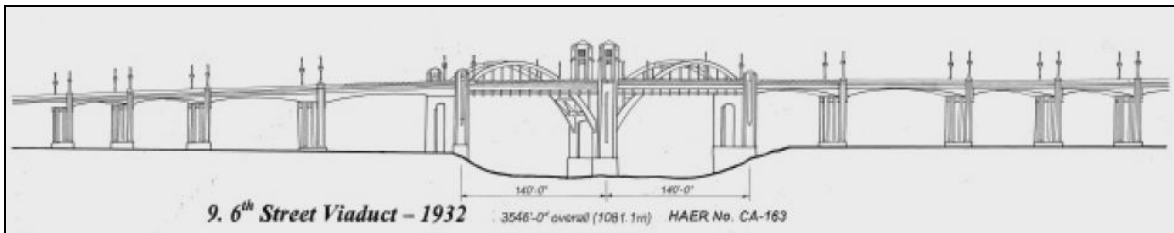


Figure 17 Excerpted Profile of Sixth Street Viaduct

(Line drawing from Historical American Engineering Record (HAER), National Park Service, Department of the Interior, Grant Day, delineator, 2000. "Los Angeles River Bridge Elevations" Los Angeles River Bridge Recording Project- 1911-1934. HAER 176.)

The 6th Street Viaduct (Bridge No. 53C-1880) was surveyed as part of the Caltrans 1985-1986 Bridge Survey, and Caltrans identified it as a significant structure at that time. The SHPO determined it eligible for separate listing in the NRHP, and the viaduct was assigned a status code of “2S2,” which was defined as “Determined eligible for separate listing through a consensus determination by a federal agency and the State Historic Preservation Officer” at the time of the survey in late 1985. The 6th Street Viaduct was determined eligible on October 19, 1986. Its eligibility is under Criteria A and C, for its association with the Los Angeles River bridge program, and its extraordinary Streamline Moderne design, steel, and reinforced concrete design. Its period of significance is from 1933, when it was completed, until 1957 (50-year cut-off), and its significance is at the state level.

The 6th Street Viaduct was also determined eligible for listing in the NRHP as a contributor to a thematic group of 118 “Historic Highway Arch and Other Bridges in California” in 1987.¹⁵ Additionally, the viaduct was designated as a City of Los Angeles Historic-Cultural Monument (HCM) in January 2008.

Previously, the 6th Street Viaduct had been identified as one of 29 City of Los Angeles “monumental bridges” based on an update to the 1987 statewide historic bridge survey by Caltrans in 2004 (*City of Los Angeles Monumental Bridges, 1900-1950*, prepared by JRP Historic Consulting).¹⁶ However, the study concluded that the bridges in Los Angeles that are significant for their association with the Bureau of Engineering’s bridge program in the early to mid-twentieth century do not constitute a historic district, as defined by National Park Service guidelines for applying the NRHP criteria. Caltrans submitted these study findings to the SHPO.

4. Impacts on Section 4(f) Property

As discussed in Section 1, the use of Section 4(f) properties typically occurs when there is either permanent incorporation of the Section 4(f) site for a transportation project (i.e., actual use), temporary occupancy of the protected resource that is considered adverse in terms of the preservationist purposes of the Section 4(f) statute, or where the proximity of a project to the Section 4(f) site, without acquisition of land, causes impacts such as noise, visual, or access restriction that could impair the values and integrity of the land (i.e., constructive use).

¹⁵ Historic Resources Evaluation Report, 6th Street Viaduct Seismic Improvement Project. October 2007.

¹⁶ JRP Historic Consulting for Caltrans, “City of Los Angeles Monumental Bridges, 1900-1950,” May 2004.

This section discusses whether any permanent or temporary occupation of a property would occur, or whether the proximity of the project would cause any access disruption, noise, vibration, or aesthetic effects that would substantially impair the features or attributes that qualify the resource for protection under Section 4(f).

Alternative 1 – No Action

Use of Section 4(f) properties would not be required under this alternative as long as the viaduct remains in service. If the viaduct was determined to be unserviceable due to ASR and/or earthquake damage, the City would seek emergency funding sources to replace it. In this scenario, the City would replace the viaduct under any circumstance. It is likely that the City would use the viaduct replacement design developed thus far for this emergency replacement. Impacts to Section 4(f) properties as a result of the new viaduct construction would be similar to Alternative 3 – Replacement.

Alternative 2 – Viaduct Retrofit

There would be a direct use of the 6th Street Viaduct under this alternative. The Retrofit Alternative would alter and/or destroy the historic materials, features, and spatial relationships that characterize the 6th Street Viaduct. Encasing the columns with steel would increase the size of the columns and decrease the distance between the columns in each bent. In addition, construction of new foundations, grade beams, retrofitting of bent caps, and closure of some expansion joints would alter the spatial relationship of the historic features of the viaduct and would alter the historic character of the viaduct through the introduction of new structural and visual elements. Because Alternative 2 would result in the alteration of the viaduct in a manner not consistent with the *Secretary's Standards for the Treatment of Historic Properties*, Alternative 2 would have a permanent, adverse impact on this historic property¹⁷. The bridge is so structurally deficient that it cannot be rehabilitated to meet minimum acceptable seismic requirements without adversely affecting the historic integrity of the bridge.

¹⁷ The Secretary of Interior's Standards for the Treatment of Historic Properties Standards are widely used guidance that focus on approaches that retain and conserve historic materials and encourage that deteriorated material be replaced in kind and in character with the original. The Standards speak to retaining to the maximum extent practicable distinctive materials, features, spaces and spatial relationships, and construction techniques of the historic property. Alternative 2 would cover up prominent character-defining features that would be physically and visually incompatible with the original design; construction of shear walls as structural reinforcement would change the overall massing, original spacing, and proportionality of the original arch columns with one another. Distinctive design features, such as the original bridge columns, would be wrapped in steel canisters and plastered over and railing replaced. That these alterations proposed under Alternative 2 would be so out of character and diminish the historic integrity to such a degree that they would collectively constitute an adverse effect on the historic resource was acknowledged by the California SHPO.

Alternative 3 – Viaduct Replacement

There would be a direct use of the 6th Street Viaduct under this alternative. This proposed alternative would demolish the 6th Street Viaduct to build the proposed new structure. The existing viaduct would be replaced with one of five potential bridge concept designs of one of three alternative alignments under consideration. (Refer to EIR/EIS Chapter 2, Section 2.3.3, for further details.). As such, Alternative 3 would have a permanent, adverse impact on this historic property.

5. Avoidance Alternatives

An avoidance alternative is prudent and feasible if it avoids using the Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the Section 4(f) property to the preservation purpose of the Section 4(f) statute.

Section 23 CFR 774.17 provides a balancing test to determine whether an avoidance alternative is prudent. Listed below are 6 factors to consider when determining whether an avoidance alternative is prudent:

- Compromises the project so that it is unreasonable given the purpose and need;
- Results in unacceptable safety or operational problems;
- After reasonable mitigation, still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe environmental justice impacts; or
 - Severe impacts to other federally protected resources.
- Results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- Causes other unique problems or unusual factors; or
- Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

The following avoidance alternatives were evaluated using the factors in 23 CFR 774.17, and six specific factors were considered to determine whether each alternative is prudent. Please refer to Table 1, Evaluation of Avoidance Alternative Selection Process, for the balancing test outlining the six factors used to determine whether each avoidance alternative is prudent.

Alternative 1 – No Action

The following discussion is based on the assumption that the viaduct would remain in service under the No Action Alternative.

The 6th Street Viaduct crosses the Los Angeles River in an east-west direction. This proposed alternative would provide ongoing maintenance and inspection, but the viaduct would not be seismically retrofitted or repaired. The concrete would continue to deteriorate due to ASR, resulting in the viaduct remaining unsafe for pedestrian and vehicular traffic.

Because Alternative 1 would not result in the physical destruction of the viaduct or materially alter the historic fabric of the viaduct in a manner not consistent with the Secretary of the Interior’s *Standards for the Treatment of Historic Buildings*, the No Action Alternative would avoid the use of this Section 4(f) historic property; however, the viaduct would continue to be vulnerable to failure in the event of a major earthquake, and the ASR-damaged concrete would not be replaced or reinforced. Furthermore, existing design deficiencies would not be corrected.

In summary, the No Action Alternative is not prudent and feasible because it compromises the project so that it is unreasonable to proceed given the project’s purpose and need. In addition, there is no method to stop the ASR. The concrete in the viaduct would continue to deteriorate due to ASR, resulting in unacceptable seismic safety risk.

Replacement Alternatives

Two Replacement Alignment Alternatives, which would allow the existing 6th Street Viaduct to remain standing, are summarized here. Neither alternative is prudent nor feasible, as described in greater detail below. Please refer to Appendix N for more detailed information on these alternatives.

Replacement Alignment 8

Replacement Alignment 8 proposes to preserve the existing viaduct by constructing a new viaduct to the north of the existing viaduct. Under this alternative, the existing viaduct would be retrofitted for preservation purposes and used only for pedestrian and bicycle traffic.

Although this alternative would allow the existing 6th Street Viaduct to remain standing, potentially for pedestrian and bicycle access only, the existing viaduct would still have to be seismically retrofitted for public safety in the same manner (i.e., “no collapse”

standard), as described under the Retrofit Alternative and the ASR deterioration would continue (see Chapter 2). This alternative would still have an adverse effect on this historic property, as determined by Caltrans and the SHPO for Alternative 2.

In summary, Replacement Alignment 8 would not be prudent and feasible because:

- The viaduct is classified as a Category 1 Structure and seismic retrofit is mandatory, so even if this alignment was selected, the viaduct would have to be retrofitted for public safety. The Replacement Alignment 8 alternative compromises the project to a degree that is unreasonable to proceed given the stated purpose and need.
- The estimated cost to allow the existing 6th Street Viaduct to remain standing and to construct a replacement viaduct to the north of the existing 6th Street Viaduct would be approximately \$515 million (Estimated Retrofit \$197 million + Average Replacement \$318 million = \$515 million). The high cost estimate for this alternative would constitute construction costs of an extraordinary magnitude.
- There is no method to stop ASR. The concrete in the viaduct would continue to deteriorate due to ASR, resulting in unacceptable seismic safety problems. In the event of either advanced ASR or earthquake damage, the viaduct likely would have to be taken out of service.
- Although Alignment 8 would meet the project purpose and need, unique problems are associated with this alternative (see Section 2-5, Alternatives Considered but Eliminated from Further Discussion and Table 2 below). Constructing a new viaduct to the north and extending its limits to the east and west would result in substantially greater right-of-way (ROW) impacts than any of the other proposed alternatives. Construction of the viaduct under Replacement Alignment 8 would also create major impacts to the sewer siphon across the Los Angeles River and the sewers located on the east bank of the river. In addition, this alignment would potentially impact one LADWP transmission tower located on the east bank of the river. The alignment would require the construction of a new US 101 northbound on-ramp, and two new bridges would also be required over I-5 for the northbound and southbound sections of the freeway. There would be greater impacts to the railroads by adding a new bridge to the north of the existing viaduct, plus the additional space required for retrofitting the existing columns that are located within the railroad ROW.

Replacement Alignment 9

Replacement Alignment 9 proposes to preserve the existing viaduct by constructing a new viaduct to the south of the existing viaduct. Under this alternative, the existing viaduct would be retrofitted for preservation purposes and used only for pedestrian and bicycle traffic.

Although this alternative would allow the existing 6th Street Viaduct to remain standing, potentially for pedestrian and bicycle access only, the existing viaduct would still have to be seismically retrofitted for public safety in the same manner (i.e., “no collapse” standard), as described under the Retrofit Alternative and the ASR deterioration would continue (see Chapter 2). This alternative would still have an adverse effect on this historic property, as determined by Caltrans and the SHPO for Alternative 2.

In summary, Replacement Alignment 9 would not be prudent and feasible because:

- The viaduct is classified as a Category 1 Structure and seismic retrofit is mandatory, so even if this alignment was selected, the viaduct would have to be retrofitted for public safety. Replacement Alignment 9 alternative compromises the project to a degree that is unreasonable to proceed given the stated purpose and need.
- The estimated cost to allow the existing 6th Street Viaduct to remain standing and to construct a replacement viaduct to the south of the existing 6th Street Viaduct would be approximately \$515 million. The high cost estimate for this alternative would constitute construction costs of an extraordinary magnitude.
- There is no method to stop ASR. The concrete in the viaduct would continue to deteriorate due to ASR, resulting in unacceptable seismic safety problems. In the event of either advanced ASR or earthquake damage, the viaduct likely would have to be taken out of service.
- One of the main drawbacks of this approach is that constructing a new viaduct to the south and extending its limits to the east and west would result in substantially greater ROW impacts, similar to Replacement Alignment 8 discussed above (see Section 2-5, Alternatives Considered but Eliminated from Further Discussion and Table 2 below). This alignment would impact three of the LADWP transmission towers (two on the west bank of the river and one on the east bank). In addition, LADWP’s electrical substation between Santa Fe Avenue and Mesquit Street would be impacted. A new northbound on-ramp connection to US 101 would be required. Two new bridges would also be required over I-5 for the northbound and southbound sections of the freeway. There would be greater impacts to the

railroads by adding a new bridge to the south of the existing viaduct, plus the additional space required for retrofitting the existing columns that are located within the railroad ROW.

5.3 Transportation System Management and Transportation Demand Management Alternatives

Transportation System Management (TSM) strategies consist of actions that improve the efficiency of existing facilities to increase the number of vehicle trips that a facility can carry without increasing the number of through lanes. TSM also encourages improved mobility on transportation facilities via transit, bicycle, and pedestrian improvements. The following TSM measures have been incorporated into the Replacement Alternative for this project: up to 10-ft-wide sidewalks; up to 19-ft-wide outside lanes, including shoulders for bicycles; a left-turn lane at Mateo Street; and traffic signal improvements at both ends of the project. However, TSM measures alone cannot satisfy the purpose and need of the proposed project.

Transportation Demand Management (TDM) focuses on regional strategies for reducing the number of vehicle trips and vehicle miles traveled, as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding travelers' transportation choices in terms of travel methods, time, route, costs, and the quality and convenience of the travel experience. Since the proposed 6th Street Viaduct project is a seismic safety and bridge functional deficiency improvement, TDM does not meet the purpose and need.

In summary the TSM alternative is not feasible and prudent because it does not satisfy the purpose and need of the project. The ASR deterioration would continue, resulting in unacceptable seismic safety risks. The viaduct would still be vulnerable to failure in the event of a major earthquake, and it would eventually have to be taken out of service due to advanced ASR or earthquake damage, requiring construction of a new viaduct.

Table 1 summarizes the results of avoidance alternative evaluation.

**Table 1
Evaluation of Avoidance Alternatives**

Balancing Factors	No Action Alternative	Replacement Alignment 8	Replacement Alignment 9	TSM Alternatives
Compromises the project so that it is unreasonable given the purpose and need	Does not satisfy the Purpose and Need	Meets the Purpose and Need	Meets the Purpose and Need	Does not satisfy the Purpose and Need
Results in unacceptable safety or operational problems	Does not correct the seismic vulnerability to a “no collapse” standard or resolve design deficiencies	New viaduct meets design standards and existing viaduct seismic vulnerability corrected to a “no collapse” standard	New viaduct meets design standards and existing viaduct seismic vulnerability corrected to a “no collapse” standard	Does not correct the seismic vulnerability to a “no collapse” standard or resolve design deficiencies
After reasonable mitigation, still causes:				
<ul style="list-style-type: none"> Severe social, economic, or environmental impacts 	If viaduct is taken out of service due to advanced ASR or earthquake damage, and requires replacement, would cause business relocations. .	Approximately 47 businesses would have to be relocated.	Approximately 49 businesses would have to be relocated.	This factor was considered but was found to be not applicable to this alternative.
<ul style="list-style-type: none"> Severe disruption to established communities 	If viaduct is taken out of service due to advanced ASR or earthquake damage, and requires replacement, would cause community disruption. .	Right-of-way impacts to Boyle Heights Community and Los Angeles Central City North District	Right-of-way impacts to Boyle Heights Community and Los Angeles Central City North District	This factor was considered but was found to be not applicable to this alternative.
<ul style="list-style-type: none"> Severe environmental justice impacts 	If viaduct is taken out of service due to advanced ASR or earthquake damage, and requires replacement, would cause disproportionate impacts on low-income and minority populations from property acquisitions and traffic detours.	Would cause disproportionate higher adverse impacts on low income and minority populations on both sides of the river as more property would be acquired and larger impacted area.	Would cause disproportionate higher adverse impacts on low income and minority populations on both sides of the river as more property would be acquired and larger impacted area.	This factor was considered but was found to be not applicable to this alternative.
<ul style="list-style-type: none"> Severe impacts to other federally protected resources 	This factor was considered but was found to be not applicable to this alternative.	This factor was considered but was found to be not applicable to this alternative.	This factor was considered but was found to be not applicable to this alternative.	This factor was considered but was found to be not applicable to this alternative.
Results in additional construction, maintenance, or operational costs of an extraordinary magnitude	Would result in frequent maintenance upkeep, in addition to the cost of replacement in the event of failure due to ASR or seismic damage.	Maintenance would be required for both old and new viaducts. Also creates major impacts to sewer siphon	Maintenance would be required for both old and new viaducts. Also creates major impacts to sewer siphon and LADWP transmission lines	Would result in frequent maintenance upkeep

Table 1
Evaluation of Avoidance Alternatives

Balancing Factors	No Action Alternative	Replacement Alignment 8	Replacement Alignment 9	TSM Alternatives
Causes other unique problems or unusual factors	This factor was considered but was found to be not applicable to this alternative.	Essentially doubles the construction cost	Essentially doubles the construction costs, and disrupts electric transmission lines at a high cost and may interrupt electric power supply	This factor was considered but was found to be not applicable to this alternative.
Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude	Would cumulatively cause impacts of extraordinary magnitude in the areas of cost, public safety, and community disruption in the event of failure due to ASR or seismic damage.	This factor is not applicable as the factors discussed above are not individually minor.	This factor is not applicable as the factors discussed above are not individually minor.	This factor was considered but was found to be not applicable to this alternative.
Prudent and Feasible Determination	No	No	No	No

Note: Balancing factors are based on 23 CFR Section 774.3(c)(1).

6. Measures to Minimize Harm

Agreement among the SHPO, the City, and Caltrans has been reached through the Section 106 process of the NHPA on measures to resolve the adverse effect, including all possible planning to minimize harm as defined in 23 CFR 774.17. Those measures would be incorporated into the project. A Memorandum of Agreement (MOA) for the preferred alternative (see Section 2.4), which includes stipulations and measures to resolve the adverse effect and received SHPO concurrence on May 10, 2010, is included in Attachment B of this Section 4(f) Evaluation and Appendix O of the Final EIR/EIS.

6.1 Retrofit Alternative

Approximately 95 percent of the original viaduct would be retained because only the railings would be replaced. The remaining original structure would be incorporated into the retrofit design; however, the original structure would be enclosed within a new “skin” and would not be visible. New construction would be designed in a manner consistent with the Secretary of Interior’s *Standards for the Treatment of Historic Properties*. Potential mitigation measures include the following:

- The City would incorporate all applicable Secretary of Interior’s Standards for the Treatment of Historic Properties (36 CFR Part 68) into the design of retrofitting components.

- The City would install two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was retrofitted. Additionally, the City would install two Cultural Heritage plaques, one at each end of the bridge, on the interior bridge rails in accordance with the City of Los Angeles' Cultural Heritage Monument program.
- The 6th Street Viaduct was previously recorded as part of the Historical American Engineering Record (HAER) program in 1996. Prior to any viaduct construction activities, Caltrans and the City would contact the National Park Service (NPS) Western Region Office in Oakland, California to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. If additional documentation is required, the City/Caltrans shall ensure that the additional documentation is completed and accepted by NPS before the viaduct is altered. The City shall prepare draft and final reports to be reviewed by Caltrans and NPS.

6.2 Replacement Alternative

The Replacement Alternative would not retain any of the original elements of the historic property. Mitigation measures defined in the executed MOA include the following:

- The 6th Street Viaduct was previously recorded as part of the HAER program in 1996. Prior to any viaduct demolition or construction activities, Caltrans and the City would contact the NPS Western Region Office in Oakland, California to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. If additional documentation is required, the City/Caltrans shall ensure that the additional documentation is completed and accepted by NPS before the Viaduct is altered and/or demolished. The City shall prepare draft and final reports to be reviewed by Caltrans and NPS.
- The City would offer copies of the HABS/HAER documentation, consisting of an acid-free xerographic copy of the report, prepared on standard 8 ½ x 11 paper to, at a minimum, the Los Angeles Public Library, Los Angeles Conservancy, Los Angeles City Historical Society, Historical Society of Southern California, City of Los Angeles Office of Historical Resources, California Office of Historic Preservation, and Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento. The City would also place the historical information from the

HABS/HAER report on a City website with a link to a public library website, such as the Los Angeles Public Library website, available to the public for a minimum period of three years. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their website.

- The City would work with the Los Angeles Public Library to place the historical information from the HABS/HAER report on a City Web site with a link to a public library Web site, such as the Los Angeles Public Library Web site, available to the public for a minimum period of 3 years. The information link should also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their Web site.
- The City would produce a documentary (i.e., motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the broader contextual history of the City of Los Angeles. The motion picture or video would be of broadcast quality, between 30- and 90-minute duration, and would be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries; one copy would be submitted to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento.
- The City would produce and publish a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and this bridge's place in that history. The booklet would be similar in general format to the "Historic Highway Bridges of California" published by Caltrans (1991) and would include high-quality black-and-white images of the Los Angeles River Bridges, historic photographs or drawings, as appropriate, and text describing each of the bridges' location, year built, builder, bridge type, significant character-defining features, and its historic significance.
- The City would install two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced.
- The City would offer artifacts removed from the viaduct during demolition to local museums or other suitable facilities to be determined by the City. The accepting institutions should arrange their own transportation to deliver the artifacts to designated locations.

7. Coordination

Public involvement, agency coordination, and Native American tribal coordination were carried out during the proposed project development process by means of formal scoping meetings, participating agency coordination meetings, community meetings, potentially affected property owner meetings, political representative meetings, notification letters, and the creation and maintenance of a project Web site.

The scoping process was initiated by widespread notification of government agencies and the public via publication of a Notice of Intent (NOI) and a Notice of Preparation (NOP) announcing initiation of the Environmental Impact Statement (EIS) and Environmental Impact Report (EIR), respectively. The NOI was published in the *Federal Register* (Volume 72, Number 169) on August 31, 2007, in accordance with the National Environmental Policy Act (NEPA). The NOP was posted on the City of Los Angeles Web site¹⁸, the project's public Web site¹⁹, and with the Los Angeles County Clerk/Recorder throughout the public review period (July 23, 2007, to September 13, 2007), in accordance with the California Environmental Quality Act (CEQA).

Federal agencies having jurisdiction over the affected Section 4(f) resources, including the Department of Interior and the Department of Housing and Urban Development, ACHP, were on the NOI and NOP mailing list. State and local agencies having a stake over the affected Section 4(f) resources, such as State of California Historic Preservation Office, California Department of Fish and Game, Regional Water Quality Control Board, Native American tribal organizations, Los Angeles Conservancy, Los Angeles Cultural Heritage Commission, were coordinated throughout the environmental review process. The Draft EIR/EIS was also submitted to the U.S. Department of Interior (DOI) in June 2009. Several follow-up emails were sent to the DOI staff to confirm they were in receipt of the Draft EIR/EIS and Section 4(f) Evaluation. The DOI provided written comments on the Draft Section 4(f) Evaluation on September 3, 2009, and their letter is included in Appendix M (Letter no. 25).

Table 2 summarizes coordination efforts with federal agencies having jurisdiction over the affected Section 4(f) resources.

¹⁸ http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm

¹⁹ http://www.la6thstreetviaduct.org/TheProject/documents/NOP_Public.pdf

Table 2
Coordination with Government Agencies
Having Jurisdiction over Section 4(f)

Government Agency	Description of Coordination
California State Historic Preservation Officer California Department of Parks and Recreation Office of Historic Preservation	<p>The Historic Property Survey Report (HPSR)/Historic Resources Evaluation Report (HRER)/Archaeological Study Report (ASR) prepared for this project was transmitted to the SHPO on August 9, 2009. No response was received as of October 15, 2008. An e-mail was sent from Claudia Harbert, Caltrans District 7, on 11/19/08 to inform the SHPO that Caltrans is hereby informing all concerned that we are proceeding forward per stipulation VIII.C.5.a of the PA with preparation of the Finding Of Effect (FOE) documentation for this project. The FOE documentation was submitted to the SHPO for review on 1/27/09. A letter from SHPO to Caltrans concurring that proposed project will have an adverse effect on the Sixth Street Viaduct was received on March 19, 2009.</p> <p>A Memorandum of Agreement (MOA) containing stipulations to resolve the adverse effect as a result of the replacement alternative implementation was submitted to the SHPO on January 13, 2010. The SHPO signed the MOA on May 10, 2010.</p>
U.S. Department of Interior	<p>Caltrans contacted the staff of the DOI to confirm receipt of the Draft EIR/EIS. DOI staff responded that the Draft EIR/EIS was being reviewed and written comments were provided on September 3, 2009.</p>

Section 106 consultation with SHPO under the PA was initiated by Caltrans' professionally qualified staff (PQS), as required by PRC 5024.5, on September 9, 2008. An HPSR, with supporting HRER and ASR, was submitted to the SHPO for review on September 9, 2008. No response was received from the SHPO within 30 days; therefore, Caltrans proceeding per stipulation VIII.C.5.a of the PA as indicated in the November 12, 2008, e-mail from Gary Iverson to the SHPO, The Finding of Effect (FOE) was submitted to SHPO on January 27, 2009. A letter dated March 19, 2009, from SHPO to Caltrans concurred with the finding that the proposed project will have an adverse effect on historic property (i.e., 6th Street Viaduct).

A Memorandum of Agreement (MOA) was executed by Caltrans and the SHPO on May 10, 2010 in compliance with the requirements of Section 106 of the National Historic Preservation Act. The purpose of the MOA is to resolve adverse effects on the historic 6th Street Viaduct as a result of project implementation. The MOA is provided in Attachment B of this Section 4(f) Evaluation and Appendix O of this EIS/EIR.

8. Least Harm Analysis and Concluding Statement

23 CFR 774.3 states that if there is no feasible and prudent avoidance alternative, then the Administration may approve only the alternative that:

1. Causes the least overall harm in light of the statute's preservation purpose. The least overall harm is determined by balancing the following factors:

- (i) The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
 - (ii) The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
 - (iii) The relative significance of each Section 4(f) property;
 - (iv) The views of the official(s) with jurisdiction over each Section 4(f) property;
 - (v) The degree to which each alternative meets the purpose and need for the project;
 - (vi) After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
 - (vii) Substantial differences in costs among the alternatives.
2. The alternative selected must include all possible planning, as defined in §774.17, to minimize harm to Section 4(f) property.

Based on the previous discussion, there is no feasible and prudent alternative to the use of the 6th Street Viaduct. As required by 23 CFR 774.3, all proposed build alternatives were analyzed to determine the alternative that causes the least overall harm as described below.

Alternative 2 (Viaduct Retrofit) would alter the historic character of the viaduct through new structural and visual elements while Alternative 3 (Viaduct Replacement) would demolish and replace the entire structure. The SHPO concurred that implementation of either Alternative 2 or Alternative 3 would result in an adverse effect on the 6th Street Viaduct and has entered into the MOA with Caltrans and the City of Los Angeles that contains stipulations to resolve the adverse effect of Alternative 3, the preferred alternative. Under Alternative 2, the 6th Street Viaduct would remain, but the historic character would be adversely affected and the seismic retrofit would only have a 30-year design life. Under Alternative 3, the 6th Street Viaduct would be replaced. The City of Los Angeles Cultural Heritage Commission (CHC) favors partial preservation, but none of the partial preservation alternatives considered would resolve the ASR problem, and the viaduct would eventually have to be replaced.

Implementation of Alternative 2 would not permanently solve the ASR problem. Therefore, it would reduce vulnerability of the 6th Street Viaduct in a major earthquake event to a substantially lesser degree (a minimal standard of “no collapse”) than Alternative 3. The estimated cost for Alternative 2 is \$199 million as compared with

\$306 million for Alternative 3. However, the design life expectancy for Alternative 2 is approximately 30 years compared with 75 years for Alternative 3. The life-cycle cost of Alternative 2 would be substantially higher because it would include the cost of a new bridge after approximately 30 years due to continuing ASR deterioration. As such, Alternative 2 does not meet the purpose and need of the project as well as Alternative 3 because significant damage could occur in a major earthquake and the viaduct would likely have to be taken out of service.

Implementation of Alternative 2 would result in less impact to traffic and circulation and utilities and service systems because the construction period is shorter. In addition, Alternative 2 would result in less ROW impact compared with Alternative 3. However, implementation of Alternative 2 would not resolve the design deficiencies of the 6th Street Viaduct. The existing viaduct does not have shoulders for bicycles; implementation of Alternative 2 would not accommodate the future designated bike lane along 6th Street Viaduct. The existing viaduct does not have a stormwater runoff collection system; implementation of Alternative 2 would not provide water quality improvements compared to Alternative 3.

The results of the Least Harm Analysis described above are summarized in Table 3.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the 6th Street Viaduct, and the proposed action includes all possible planning to minimize harm to the 6th Street Viaduct resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

**Table 3
Least Harm Analysis**

Factors	Viaduct Retrofit Alternative 2	Viaduct Replacement Alternative 3	Least Damaging Alternative to Section 4(f) Resources
Ability to mitigate adverse impacts to the Section 4(f) resource	A new MOA with SHPO that includes stipulations to resolve the adverse effect would be implemented.	The existing MOA with SHPO that includes stipulations to resolve the adverse effect would be implemented.	Similar for both Alternatives
Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features	Adverse impacts to Historic 6 th Street Viaduct cannot be avoided or mitigated to a level of no adverse effect. The 6th Street Viaduct structure would remain, but the historic character would be adversely affected and the seismic retrofit would only have a 30-year design life.	Adverse impacts to Historic 6 th Street Viaduct cannot be avoided or mitigated to a level of no adverse effect. The 6th Street Viaduct would be demolished and replaced.	Alternative 2
Relative significance of the Section 4(f) property	6 th Street Viaduct is individually NRHP and CRHR eligible; eligible as one of a thematic group of 118 historic highway arch and other bridges in CA; also City Cultural-Historical Monument #905.	6 th Street Viaduct is individually NRHP and CRHR eligible; eligible as one of a thematic group of 118 historic highway arch and other bridges in CA; also City Cultural-Historical Monument #905.	Similar for both Alternatives
Views of the officials with jurisdiction over the Section 4(f) property	SHPO concurred that the proposed project would have an adverse effect on the Section 4(f) resource	SHPO concurred that the proposed project would have an adverse effect on the Section 4(f) resource.	Similar for both Alternatives
Degree to which each alternative meets the purpose and need	Alternative 2 does not meet the purpose and need as well as Alternative 3 because it does not resolve the ASR, nor does it correct the design deficiencies of the existing viaduct.	This alternative meets the stated purpose and need of the project.	Alternative 3
After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)	Impacts to traffic circulation and utilities would be less. Cannot accommodate bike lanes, less pedestrian-friendly, only seismically retrofitted to “no collapse” criteria with 30-year design life.	Greater impact to ROW, traffic circulation, and utilities than Alternative 2. Would accommodate bike lanes and is more pedestrian-friendly. Higher rated visually. Includes on-site runoff treatment. State of the art seismic design with 75 year design life.	Alternative 3
Substantial differences in costs among alternatives	The estimated cost for this alternative is \$199 million. Design life expectancy is approximately 30 years. The life-cycle cost would be substantially higher because it would include the cost of a new bridge after approximately 30 years due to continuing ASR deterioration.	The estimated cost for the preferred alternative is \$306 million. Design life expectancy is approximately 75 years.	Alternative 3

Attachment A
Letters and Other Correspondence

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL PLANNING

100 S. MAIN STREET, SUITE 100

LOS ANGELES, CA 90012

PHONE (213) 897-0703

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07-LA Local Assistance

EA 965100

6th Street Viaduct Seismic Improvement Project

September 9, 2008

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Subject: Determinations of Eligibility for the 6th Street Viaduct Seismic Improvement Project,
Los Angeles County, California, 07-LA-Local Assistance

Dear Mr. Donaldson

The California Department of Transportation (Caltrans) is initiating consultation with the State Historic Preservation Officer (SHPO) regarding the proposed improvements to the 6th Street Viaduct in Los Angeles County. This consultation is being undertaken in accordance with the January 1, 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (PA). We are consulting with you under Stipulation VIII.C.5 of the PA, which requires that we seek your concurrence with our determinations of eligibility for historic properties.

Caltrans is initiating this consultation as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under the National Environmental Policy Act as well as consultation and coordination responsibilities under other federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

Caltrans, in conjunction with the City of Los Angeles Bureau of Engineering, is proposing to improve the seismic safety of the 6th Street Viaduct in Los Angeles County. The proposed project would either seismically retrofit the existing viaduct, or replace the existing viaduct with a new four-lane structure on one of three alignment alternatives. A full project description can be found on pages 1 to 4 of the enclosed Historic Property Survey Report (HPSR).

Consultation and identification efforts for the proposed undertaking (summarized on pages 1 – 2 in the HPSR) resulted in the identification of thirty-one properties requiring evaluation within the Area of Potential Effect (APE) as follows:

Name	Address/Location	Community	OHP Status Code	Map Ref. #
BNSF/AT & SFRY Co.	5164-005-800	Los Angeles	6Z	26
BNSF/AT & SFRY Co.	5164-004-802	Los Angeles	6Z	28
BNSF/AT & SFRY Co.	5164-004-804	Los Angeles	6Z	30
Union Pacific Railroad	5171-014-808	Los Angeles	6Z	33
Union Pacific Railroad	5171-014-809	Los Angeles	6Z	34
KC Products Co.	1600 E. 6 th Street	Los Angeles	6Z	45
Senegram Holding Co.	601 S. Anderson Street	Los Angeles	6Z	47
Ken Redlamps (Senegram Holding Co.)	607 S. Anderson Street	Los Angeles	6Z	48
Philip Senegram Co. (Senegram Holding Co.)	611 S. Anderson Street	Los Angeles	6Z	49
Senegram Holding Co.	613 S. Anderson Street	Los Angeles	6Z	50
Cal Fiber Co. (Senegram Holding Co.)	621 S. Anderson Street	Los Angeles	6Z	52
Senegram Holding Co.	629-631 S. Anderson Street	Los Angeles	6Z	54
A.M.F. Supplies, Inc.	600 S. Anderson Street	Los Angeles	6Z	57
Sun Max Produce USA	622 S. Anderson Street	Los Angeles	6Z	60
624 S. Anderson Street building	624 S. Anderson Street	Los Angeles	6Z	62
601 S. Clarence Street building	601 S. Clarence Street	Los Angeles	6Z	67
605 S. Clarence Street building	605 S. Clarence Street	Los Angeles	6Z	68
BNSF/AT & SFRY Co.	5171-015-901	Los Angeles	6Z	100
BNSF/AT & SFRY Co.	5164-016-909	Los Angeles	6Z	103
BNSF/AT & SFRY Co.	5164-016-807	Los Angeles	6Z	104
BNSF/AT & SFRY Co.	5164-016-806	Los Angeles	6Z	105
BNSF/AT & SFRY Co.	5164-016-906	Los Angeles	6Z	106
BNSF/AT & SFRY Co.	5164-016-803	Los Angeles	6Z	107
Lumary's Tires/Michelin	600-602 S. Santa Fé Avenue/1474-1486 E. 6 th Street	Los Angeles	6Z	110
1450 E. 6 th Street building	1450 E. 6 th Street	Los Angeles	6Z	115
605 S. Santa Fé Avenue building	605 S. Santa Fé Avenue	Los Angeles	6Z	119
613 Imperial Street building	613 Imperial Street	Los Angeles	6Z	128
Southwestern Bag Co.	601 Mateo Street	Los Angeles	6Z	129
Iron Mountain building	1340 E. 6 th Street	Los Angeles	6Z	133
1340 E. 6 th Street building	1340 E. 6 th Street/ 5164-011-002	Los Angeles	6Z	134
650 S. Clarence Street building	650 S. Clarence Street	Los Angeles	6Z	144

One property, the Sixth Street Viaduct (Bridge #s 53-0595S, 53C-1880), Map Ref. # 145, was previously determined eligible for the National Register of Historic Places in 1986, 1987, and 2004.

One historic-era archaeological site (Primary No. 19-003683), consisting of domestic refuse, has not been previously evaluated for National Register of Historic Places (NRHP) eligibility. All project effects to the site can be avoided by the establishment of an Environmentally Sensitive Area (ESA).

Pursuant to Stipulation VIII.C.3 of the PA, Caltrans is considering Primary No. 19-003683 to be eligible for the NRHP under Criterion D for the purposes of this undertaking without conducting subsurface testing or surface collection and will establish and enforce ESAs to ensure that there will not be an adverse effect to the property as a result of the proposed undertaking pursuant to Stipulation X.B.2.a(ii). Native American consultation confirmed that the sites only have values that may qualify them as NRHP eligible under Criterion D.

Pursuant to Stipulation VIII.C.5 of the PA, Caltrans is requesting your concurrence with the following eligibility determinations:

- None of the properties evaluated as a result of this project are eligible for the National Register of Historic Places.

We look forward to receiving your response within 30 days of receipt of this submittal in accordance with Stipulation VIII of the PA. Pursuant to Stipulation X.A of the PA, Caltrans will apply the Criteria of Adverse Effect set forth in 36 CFR 800.5 (a)(1) and submit that documentation to your office at a later time.

If you need any additional information, please do not hesitate to contact Caltrans District 7 Architectural Historian Claudia A. Harbert (phone: 213.897.0415; e-mail: claudia_harbert@dot.ca.gov). Thank you for your assistance with this undertaking.

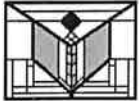
Sincerely,



for GARY IVERSON, Chief
Central Area Project/Cultural Resources Services
Caltrans District 7
Division of Environmental Planning

Attachment: 6th Street Viaduct Seismic Improvement Project HPSR with HRER and ASR

Cc: Wally Stokes, City of Los Angeles Bureau of Engineering; Greg King – CCSO HQ; Jill Hupp – CCSO HQ.



Claudia Harbert/D07/Caltrans/CAGov
11/19/2008 01:11 PM

To Dawn Kukla/D07/Caltrans/CAGov@DOT
cc
bcc

Subject Fw: 30 days past notice: 6th Street - City of Los Angeles

Claudia Harbert
Associate Architectural Historian
Caltrans District 7
Division of Environmental Planning
100 S. Main Street
Los Angeles, CA 90012

----- Forwarded by Claudia Harbert/D07/Caltrans/CAGov on 11/19/2008 01:10 PM -----



Gary Iverson/D07/Caltrans/CAGov
11/12/2008 04:16 PM

To sstratton@parks.ca.gov, smikesell@parks.ca.gov
cc Claudia Harbert/D07/Caltrans/CAGov@DOT, Jill Hupp/HQ/Caltrans/CAGov@DOT
Subject 30 days past notice: 6th Street - City of Los Angeles

The following project was sent by Caltrans District 7 Division of Environmental Planning to SHPO:

Historic Property Survey Report for the City of Los Angeles 6th Street Bridge Project, City and County of Los Angeles, California

SHPO received this documentation on September 15, 2008 (Identification #FHWA080915).

The 30 day review period ended on October 15, 2008.

Since 30 days for comment has now passed, Caltrans is hereby informing all concerned that we are proceeding forward per stipulation VIII.C.5.a of the PA with the preparation of the Finding Of Effect documentation for this project.

Gary Iverson

"Man has no nobler function than to defend the truth"
- Ruth McKenney

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-7507
FAX (916) 653-7757
TTY (916) 653-4086



*Flex your power!
Be energy efficient!*

January 27, 2009

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
P. O. Box 942896
Sacramento, CA 94296-0001

07-LAN-0
Sixth Street Viaduct Seismic
Improvement Project
OHP Ref. #FHWA080915

Dear Mr. Donaldson:

Subject: Finding of Adverse Effect for the Sixth Street Viaduct Seismic Improvement Project in the City of Los Angeles, Los Angeles County, California - FHWA080915

The California Department of Transportation (Caltrans) is continuing consultation with the State Historic Preservation Officer (SHPO) regarding our finding of adverse effect for the above referenced project. This consultation is undertaken in accordance with the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation (PA)*. We are consulting with you under Stipulation X.C.1.a of the PA, which requires consultation with the SHPO regarding a finding of adverse effect.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

In conjunction with Caltrans, the City of Los Angeles proposes to make improvements to the Sixth Street Viaduct over the Los Angeles River (Bridge 53C-1880) and the Sixth Street Overcrossing (Bridge 53-0595), an element of the Hollywood Freeway (US 101), in order to correct seismic deficiencies by either retrofitting the existing Sixth Street Viaduct or replacing it with a new structure. A discussion of the proposed alternatives can be found on pages 7 through 14 of the enclosed Finding of Effect (FOE) report. A discussion of concepts proposed for the replacement structure can be found on pages 14 through 17.

M. Wayne Donaldson, FAIA

January 27, 2009

2

Caltrans initiated consultation with the SHPO for this project with the submittal of a Historic Property Survey Report on September 15, 2008; no comments from the SHPO were received. The Area of Potential Effects for the proposed project contains two historic properties: The Sixth Street Viaduct and prehistoric archaeological site Primary No. 19-003683. Caltrans is assuming archaeological site Primary No. 19-003683 to be eligible for the National Register of Historic Places (NRHP) for the purposes of the proposed undertaking contingent on the establishment of an environmentally sensitive area that will protect the site from all project effects.

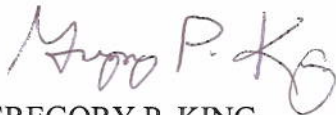
The Sixth Street Viaduct, completed in 1933, was determined eligible for the NRHP in 1985 under Criterion A and C as one of 12 significant viaducts that cross the Los Angeles River. In addition, the Sixth Street Viaduct was determined to be individually NRHP-eligible in 1986, and a City of Los Angeles Historic-Cultural Monument in January 2008.

In applying the Criteria of Adverse Effect pursuant to Stipulation X of the PA, Caltrans finds that the proposed undertaking would have an adverse effect on the Sixth Street Viaduct under all of the alternatives under consideration.

A copy of the FOE report supporting Caltrans' finding is enclosed for your review and comment. We are consulting with you pursuant to stipulation X.C.1 of the PA and request your concurrence with Caltrans' finding that the undertaking would have an adverse effect on historic properties. We look forward to receiving your response within 30 days of receipt of this submittal.

Thank you for your assistance with this undertaking. If you have any questions, please contact Jill Hupp at (916) 654-3567 or jill_hupp@dot.ca.gov.

Sincerely,



GREGORY P. KING

Chief

Cultural and Community Studies Office

Division of Environmental Analysis

Enclosure

c: G Iverson – D7; CHarbert – D7; JHupp – CCSO

JH/jh

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



March 16, 2009

Reply To: FHWA080915X

Gregory P. King, Chief
Cultural and Community Studies Office
Division of Environmental Analysis
Department of Transportation
PO Box 942874
Sacramento, CA 94274-0001

Re: Finding of Effect for the Proposed Sixth Street Viaduct Seismic Improvement Project in the City of Los Angeles, CA

Dear Mr. King:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The Federal Highway Administration (FHWA) is requesting my concurrence that the proposed project will have an adverse effect on the Sixth Street Viaduct, a property previously determined eligible for the National Register of Historic Places. Based on my review of the submitted documentation I concur.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov.

Sincerely,

A handwritten signature in cursive script that reads "Susan K Stratton for".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

DEPARTMENT OF TRANSPORTATION
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*Flex your power!
Be energy efficient!*

January 12, 2010

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
P. O. Box 942896
Sacramento, CA 94296-0001

07-LAN-0
Sixth Street Viaduct Seismic
Improvement Project

Dear Mr. Donaldson:

Subject: Draft Memorandum of Agreement for the Sixth Street Bridge Replacement Project in Los Angeles County, California - OHP Ref.FHWA080915X

The California Department of Transportation (Caltrans) is continuing consultation with the State Historic Preservation Officer (SHPO) regarding the above referenced project. This consultation is undertaken in accordance with the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation (PA)*. In accordance with Stipulation XI of the PA, Caltrans is pleased to submit the enclosed draft Memorandum of Agreement (MOA) for your review.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

In applying the Criteria of Adverse Effect pursuant to Stipulation X of the PA, Caltrans found that the proposed undertaking would have an adverse effect on Sixth Street Viaduct over the Los Angeles River (Bridge 53C-1880). Prehistoric archaeological site Primary No. 19-003683, which Caltrans is treating as a historic property for purposes of this undertaking, will be protected from all project effects by establishing it as an Environmentally Sensitive Area. Caltrans received your concurrence with our Adverse Effect finding on March 16, 2009.

"Caltrans improves mobility across California"

M. Wayne Donaldson, FAIA

January 12, 2010

2

Caltrans now proposes to resolve the adverse effect by entering into a Memorandum of Agreement (MOA), a draft of which is now enclosed for your review. Mitigation measures proposed in the draft MOA include producing a documentary that addresses the history of the Los Angeles River Monument bridges, and publishing a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and the Sixth Street Viaduct's place in that history.

We look forward to receiving your comments on the draft MOA. Thank you for your continued assistance with this undertaking. If you have any questions or, please contact Jill Hupp at (916) 654-3567.

Sincerely,



ANMARIE MEDIN

Chief

Cultural Studies Office

Division of Environmental Analysis

Enclosure

bc: GIVerson – D7; CHarbert – D7; Jill Hupp – CSO

JH/jc

Attachment B
Memorandum of Agreement

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE 6TH STREET VIADUCT SEISMIC IMPROVEMENT
PROJECT
LOS ANGELES, LOS ANGELES COUNTY, CALIFORNIA**

WHEREAS, the Federal Highways Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007, and applies to this project; and

WHEREAS, Caltrans has determined that the proposed replacement of the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) crossing the Los Angeles River, will have an adverse effect on the 6th Street Viaduct, a property determined to be eligible for the National Register of Historic Places (NRHP); and

WHEREAS, Caltrans has consulted with the California State Historic Preservation Officer (SHPO) pursuant to Stipulations X.C., and X.I. of the January 2004, *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (NHPA) (16 USC Section 470f), as amended, regarding the Undertaking's effects on historic properties and has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to pursuant to 36 CFR § 800.6(a)(1); and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking, has determined that the statutory and regulatory constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to the historic property during the Undertaking's implementation, and has further determined that it will resolve adverse effects of the Undertaking on the subject historic property through the execution and implementation of this Memorandum of Agreement (MOA); and

WHEREAS, Caltrans District 7 (District 7) and the City of Los Angeles (City), have participated in the consultation process and have been invited to concur in this MOA; and

WHEREAS, Caltrans shall ensure that the following stipulations are implemented; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on the historic property, and further agrees that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

Caltrans shall ensure the following stipulations are implemented:

I. AREA OF POTENTIAL EFFECTS

- A. The Area of Potential Effects (APE) for the Undertaking was established to include all areas within the vicinity of the Sixth Street Viaduct that may contain historic properties that would be directly or indirectly affected by the Undertaking. The APE included the maximum existing and proposed right-of-way, project construction easements, staging areas, and temporary or permanent changes in access. The APE is depicted as Exhibit 3 of Attachment A of this MOA.
- B. If modification of the Undertaking, subsequent to the execution of this MOA, necessitates the revision of the APE, Caltrans will consult with the City and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the City, and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with stipulation III.D below. If Caltrans and the SHPO reach mutual agreement on the proposed revisions, the City and Caltrans will submit a final map of the revisions, consistent with attachment 3 of the PA, no later than 30 days following such agreement.

II. TREATMENT OF HISTORIC PROPERTIES

- A. Prior to the start of any work that could adversely affect any characteristics that qualify the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) as a historic property, the City shall contact the National Park Service Western Region Office (NPS) in Oakland, California, to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. The City shall provide NPS 30 days to respond to their additional recordation determination request. If additional documentation is required, Caltrans shall ensure that the additional documentation is completed and accepted by NPS before the Viaduct is altered and/or demolished. The City shall prepare draft and final reports to be reviewed by Caltrans and NPS.
- B. Upon completion, copies of the documentation prescribed in subsection A of this stipulation, consisting of an acid-free xerographic copy of the report, prepared on standard 8 ½ X 11 paper, shall be retained by District 7, deposited in the Caltrans Transportation History Library in Sacramento, and offered by the City to, at a

minimum, the Los Angeles Public Library, Los Angeles Conservancy, Los Angeles City Historical Society, Historical Society of Southern California, City of Los Angeles Office of Historical Resources, and the California Office of Historic Preservation.

- C. The City shall work with the Los Angeles Public Library to place the historical information from the HABS/HAER report on a City website with a link to a public library website, such as the Los Angeles Public Library website, available to the public for a minimum period of three years. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their website.
- D. The City shall produce a documentary (motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the broader contextual history of the City of Los Angeles. The motion picture or video shall be of broadcast quality, between 30- and 90-minute duration, and shall be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries; one copy shall be submitted to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento.
- E. The City shall produce and publish a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and this bridge's place in that history. The booklet shall be similar in general format to the "Historic Highway Bridges of California" published by the California Department of Transportation (1991) and shall include high quality black and white images of the Los Angeles River Bridges, historic photographs or drawings, as appropriate and text describing each of the bridges' location, year built, builder, bridge type, significant character-defining features and its historic significance. City shall post an electronic version of the booklet on a City website and produce paper copies for distribution to local libraries, institutions and historical societies. One copy shall be submitted to the Caltrans Transportation Library and History Center in Sacramento. City shall maintain the camera-ready master booklet and produce additional copies if there is demand.
- F. The City shall install two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced.
- G. The City shall offer artifacts removed from the Viaduct during demolition to local museums, or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations.

III. PROJECT DOCUMENTS CRITERIA AND REVIEW

- A. The City shall submit to the SHPO for review and comment Design Development Drawings, and 30%, 60%, and 90% Construction Documents for work on the 6th Street Viaduct.
- B. SHPO will review the project documents included in each consultation package submitted by the City to determine whether the Project Documents conform to the criteria cited in paragraph A of this stipulation. SHPO will provide comments on each submittal to the City within 30 calendar days of receipt. If the SHPO does not comment within the time provided, the City may assume that the SHPO concurs that the package conforms with the criteria cited.
- C. The City will incorporate SHPO comments into the Project Documents to the fullest extent. If the City revises the Project Documents in response to the SHPO comments, then no further review is required for that submittal. The City will promptly notify SHPO in writing that it has revised the Project Documents in accordance with SHPO comments.
- D. Should the City object to incorporating any SHPO comments into the Project Documents, the City will provide SHPO with written explanation of its objection. Promptly after receiving a written objection from the City, the City and SHPO shall consult to resolve the objection. If the objection is not resolve, provision of stipulation IV.C. shall be implemented.

IV. ADMINISTRATIVE PROVISIONS

A. Definitions.

The definitions provided at 36 CFR § 800.16 are applicable throughout this MOA.

B. Professional Qualifications and Standards

Caltrans will ensure that only individuals meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulations II. A-F in this MOA.

C. Discoveries and Unanticipated Effects

If Caltrans determines after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). Caltrans at its discretion may hereunder

assume any discovered property to be eligible for inclusion in the National Register in accordance with 36 CFR § 800.13 (c).

D. Resolving Objections

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA, or to any document prepared in accordance with and subject to the terms of the MOA, Caltrans shall immediately notify the other parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection. Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.
2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30 day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation:
 - a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or
 - b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
 - c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR § 800.7(c)(4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.
4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.
5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all other

actions under this MOA that are not the subject of the objection shall remain unchanged.

6. At any time during implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans. Caltrans shall establish a reasonable time frame for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. Within 15 days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the response to the objecting party. Caltrans' decision regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.
7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and any parties that have objected pursuant to section D.6 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

E. Amendments


Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult to consider such an amendment. The amendment will be effective on the date that a copy is signed by all of the original signatories. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation III.F, below.

F. Termination

1. If this MOA is not amended as provided for in Stipulation III.E, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR § 800.16(y).

SIGNATORY PARTIES

California Department of Transportation

By: 
Jay Norvell, Chief
Division of Environmental Analysis

Date: 5/6/10


California State Historic Preservation Officer

By: 
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Date: 10 MAY 2010

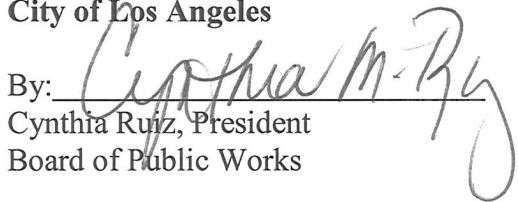
CONCURRING PARTIES

California Department of Transportation

By: 
Michael Miles, District Director
District 7, Los Angeles

Date: 5/25/2010

City of Los Angeles

By: 
Cynthia Ruiz, President
Board of Public Works

Date: 8/19/10

Attachment A: APE MAPPING

The APE Map is being kept on file with the City of Los Angeles
and Caltrans.

Appendix C
Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. Box 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY 711



*Flex your power!
Be energy efficient!*

July 20, 2010

TITLE VI POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, or age, please visit the following web page:
http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Charles Wahnnon, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14th Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353 or toll free 1-866-810-6346 (voice), TTY 711, fax (916) 324-1869, or via email: charles_wahnnon@dot.ca.gov.


CINDY MCKIM
Director

"Caltrans improves mobility across California"

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Appendix D
Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

Relocation Assistance Advisory Services

The California Department of Transportation (Caltrans) would provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of Caltrans' acquisition of real property for public use. Caltrans would assist residential displacees in obtaining comparable decent, safe, and sanitary replacement housing by providing current and continuing information on sales prices and rental rates of available housing. Nonresidential displacees would receive information on comparable properties for lease or purchase.

Residential replacement dwellings would be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees would be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance would also include supplying information concerning federal- and state-assisted housing programs, and any other known services being offered by public and private agencies in the area.

Additional Information

No relocation payment received would be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project would not be asked to move without being given at least 90 days' advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments would not be required to move unless at least one comparable "decent, safe, and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex, or national origin, is available or has been made available to them by the State.

Any person, business, farm, or nonprofit organization that has been refused a relocation payment by Caltrans, or believes that the payments are inadequate may appeal for a hearing before a hearing officer or the Caltrans' Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may choose to obtain legal council at his/her expense. Information about the appeal procedure is available from Caltrans' Relocation Advisors.

The information above is not intended to be a complete statement of all of Caltrans' laws and regulations. At the time of the first written offer to purchase, owner/occupants are given a more-

detailed explanation of the State's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and they are also given a more-detailed explanation of Caltrans' relocation programs.

Important Notice

To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California
Department of Transportation, District #07
100 South Main Street
Los Angeles, CA 90012

Appendix E

Glossary of Technical Terms

Appendix E Glossary of Technical Terms

Environmental Technical Terms

Action	“Action,” a federal term, is the construction or reconstruction, including associated activities, of a transportation facility. For the purposes of this Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the terms “project,” “proposal,” and “action” are used interchangeably unless otherwise specified. An action may be categorized as a “categorical exclusion” or a “major federal action.”
Area of Potential Effects (APE)	A term used in Section 106 regulations (36 <i>Code of Federal Regulations</i> [CFR] 800) to describe the area in which historic and archaeological resources may be affected by a federal undertaking.
Beneficial Use	A use of a natural water resource that enhances the social, economic, and environmental well-being of the user. Twenty-one (21) beneficial uses are defined for the waters of California, ranging from municipal and domestic supply to fisheries and wildlife habitat.
Best Management Practice (BMP)	Methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources.
Clean Air Act (CAA)	The Clean Air Act of 1970 and the subsequent amendments, including the Clean Air Act Amendments (CAAAAs) of 1990 (42 United States Code [U.S.C.] 7401-7671g), is the primary federal law that protects the nation's air resources. This act establishes a comprehensive set of standards, planning processes, and requirements to address air pollution problems and reduce emissions from major sources of pollutants.
Council on Environmental Quality (CEQ)	The federal agency responsible for developing regulations and guidance for agencies implementing the National Environmental Policy Act (NEPA).
Cooperating Agency	“Cooperating Agency,” under NEPA, means any agency other than the lead agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal for any action significantly affecting the human environment. Under the California Environmental Quality Act (CEQA), the term “responsible agency” is used.
Cumulative Effects	An impact on the environment that results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts result from individually minor, but collectively significant, actions taking place over a period of time.
Decibel (dB)	A unit of noise measured on a logarithmic scale that compresses the range of sound pressures audible to the human ear over a range from zero to 140, where zero decibels represents sound pressure corresponding to the threshold of human hearing and 140 decibels corresponds to a pressure at which pain occurs. Noise analysts measure sound pressure levels that people hear in decibels, much like other analysts measure linear distances in yards or meters. A-weighted decibels (dBA) refer to a weighting that accounts for the various frequency components in a way that corresponds to human hearing.

Environmental Assessment	A concise public document for which a federal agency is responsible that serves to briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact. It is the federal equivalent of the CEQA term “initial study.”
Environmental Document	A draft or final EIS or EIR, Finding of No Significant Impact, Environmental Assessment, or Negative Declaration. A Categorical Exclusion form is not considered an environmental document; it is rather the documentation that the project is exempt/excluded.
Environmental Justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.
Environmental Protection Agency (EPA)	An agency of the executive branch of the federal government charged with establishing and enforcing environmental regulations.
Floodplain	The lowlands adjoining inland and coastal waters and relatively flat areas and flood-prone offshore islands, including, at a minimum, those areas that have a 1 percent or greater chance of flood in any given year (also known as a 100-year or a Zone A floodplain).
Hazardous Materials	Substances or materials that the Secretary of Transportation has determined are capable of posing an unreasonable risk to human health, safety, and property when transported in commerce, as designated under 49 CFR Parts 172 and 173.
Hazardous Wastes	Waste materials that are, by their nature, inherently dangerous to handle or dispose of (e.g., old explosives, radioactive materials, some chemicals, some biological wastes). Usually, industrial operations produce these waste materials.
Historic Property	Any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP). The term “eligible for inclusion in the NRHP” pertains to both properties that the Secretary of the Interior has formally determined to be eligible and to all other properties that meet NRHP listing criteria.
Initial Study	Under CEQA, the Initial Study is prepared to determine whether there may be significant environmental effects resulting from a project. The Initial Study is attached to the Negative Declaration or Mitigated Negative Declaration. It can become the basis of an EIR if it concludes that the project may cause significant environmental effects that cannot be mitigated below the level of significance.
Lead Agency	The public agency that has primary responsibility for carrying out or approving a project that may have a significant effect on the environment and for preparing the environmental document.
Level of Service (LOS)	A term that denotes traffic operating conditions at a given intersection. There are six levels of service, A through F, which relate to traffic congestion from best to worst. In general, LOS A represents free-flow conditions with no congestion. Conversely, LOS F represents severe congestion with stop-and-go conditions.

Low-Income Population	A population composed of persons whose median household income is below the Department of Health and Human Services poverty guidelines.
Maintenance Area	A federal term to describe any geographic region of the United States designated nonattainment pursuant to the CAAAs and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under Section 175A of the CAAAs.
Metropolitan Planning Organization (MPO)	A federal designation for the agency responsible for cooperative transportation decision making for an urbanized area with a population of more than 50,000.
Metropolitan Transportation Plan	The official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area.
Minority Population	A population composed of persons who are Black (non-Hispanic), Hispanic, Asian American, American Indian, or Alaskan Native.
National Environmental Policy Act (NEPA)	The National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321-4347; P.L. 91-190) is the basic national charter for the protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. Its purpose is to provide for the establishment of a CEQ and to instruct federal agencies on what they must do to comply with the procedures and achieve the goals of NEPA.
National Historic Preservation Act (NHPA)	The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470-470 <i>et seq.</i> ; P.L. 89- 665), is the basic legislation of the nation's historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. Section 106 of the NHPA requires every federal agency to "take into account" the effects of its undertakings on historic properties.
National Pollutant Discharge Elimination System (NPDES) Permit	A permit that is required for facilities and activities that discharge waste into surface waters from a confined pipe or channel.
National Register of Historic Places (NRHP)	Administered by the National Park Service, the nation's master inventory of known historic properties, including buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the federal, state, and local levels.
Nonattainment Area	Any geographic region of the United States that EPA has designated as a nonattainment area for a transportation-related pollutant(s) for which a National Ambient Air Quality Standard (NAAQS) exists.
Notice of Availability	A formal public notice under NEPA announcing the availability of a completed Environmental Assessment, Draft EIS, or Final EIS. Such notice is to be published in local newspapers. For EISs, publication of such notice in the <i>Federal Register</i> is also required.
Notice of Completion	The CEQA notice submitted to the State Clearinghouse when an EIR is completed. For Caltrans EIRs, the requirement for a Notice of Completion is satisfied by the cover sheet transmitting the EIR to the Clearinghouse.
Notice of Determination	A formal written notice under CEQA filed by a lead state agency when approving any project subject to the preparation of a Negative Declaration or an EIR.

Notice of Intent (NOI)	A notice that an EIS will be prepared and considered. The NOI is published in the <i>Federal Register</i> by the lead federal agency. The CEQA equivalent of this notice is called the Notice of Preparation (NOP).
Notice of Preparation (NOP)	The CEQA notice that an EIR will be prepared for a project.
Project	CEQA (§21065) defines a “project” as an activity that may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following: <ul style="list-style-type: none">a) An activity directly undertaken by any public agency.b) An activity undertaken by a person that is supported, in whole or in part, throughout contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.
Recognized Environmental Conditions (RECs)	The presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property (Ref. American Society of Testing and Materials [ASTM] Standard E 1527-00).
Record of Decision	A formal written statement, required under NEPA, wherein a federal lead agency must present the basis for its decision to approve a selected project alternative, summarize mitigation measures incorporated into the project, and document any required Section 4(f) approval.
Regional Transportation Plan (RTP)	“...the official intermodal metropolitan transportation plan that is developed through the metropolitan planning process for the metropolitan planning area, developed pursuant to 23 CFR Part 450.”
Responsible Agency	A “public agency, other than the lead agency that has responsibility for carrying out or approving a project” (Public Resources Code [PRC] 21069). The CEQA Guidelines further explain the statutory definition by stating that a “responsible agency” includes “all public agencies other than the Lead Agency that have discretionary approval power over the project” (14 CCR 15381). State and local public agencies that have discretionary authority to issue permits, for example, fall into this category.
SAFETEA LU	The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (commonly known by its acronym, SAFETEA-LU) is the most recent federal transportation bill authorizing funding for the nation’s surface transportation programs. Signed into law in August 2005, SAFETEA-LU replaced the expired Transportation Equity Act for the 21st Century (TEA-21). The law establishes funding levels and policies for the federal government’s highway, highway safety, transit, motor carrier, and some rail programs administered by the U.S. Department of Transportation. SAFETEA-LU expires September 30, 2009.
Scoping	A process for determining the scope of issues to be addressed in an Environmental Assessment and EIS and for identifying significant issues to be analyzed in depth in an EIS.

Significance – CEQA	<p>CEQA defines a "Significant effect on the environment" as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant” (§15382).</p> <p>CEQA requires that the lead agency identify each “significant effect on the environment” resulting from the project and avoid or mitigate it.</p> <p>The CEQA Guidelines include mandatory findings of significance for certain effects, thus requiring the preparation of an EIR.</p>
Significance – NEPA	<p>NEPA stipulates that an EIS is required when the proposed federal action has the potential to “significantly affect the quality of the human environment.” To determine that potential, one must consider both the context in which the action takes place and the intensity of its effect. Section 1508.27 of the CEQ regulations define the term “significantly” as:</p> <p>Significantly, as used in NEPA, requires considerations of both context and intensity:</p> <p>(a) Context. This means that the significance of an action must be analyzed in several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.</p> <p>(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:</p> <ol style="list-style-type: none"> (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial. (2) The degree to which the proposed action affects public health or safety. (3) Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial. (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources. (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. (10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment. [43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979]

State Implementation Plan (SIP)	The portion (or portions) of an applicable air quality implementation plan approved or promulgated, or the most recent revision thereof, under sections 110, 301(d) and 175A of the CAA.
State Water Resources Control Board	The principal authority of California for regulation of the quantity and quality of waters of the state, established by act of the legislature in 1967. It assumed responsibility for administration of the Porter-Cologne Water Quality Control Act of 1969.
Statewide Transportation Improvement Plan	A staged, multiyear, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes and metropolitan plans, Transportation Improvement Plans, and processes.
Statewide Transportation Plan	The official statewide, intermodal transportation plan that is developed through the statewide transportation planning process.
Title VI of the Civil Rights Act of 1964	A policy of the United States that prevents discrimination on the grounds of race, color, or national origin in connection with programs and activities receiving federal financial assistance.
Transportation Control Measure	Any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in §108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures that control the emissions from vehicles under fixed traffic conditions are not Transportation Control Measures for the purposes of project-level conformity.
Transportation Improvement Plan	A staged, multiyear, intermodal program of transportation projects that is consistent with the metropolitan transportation plan. It is a federal term.
Trustee Agency	A state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. Trustee agencies include: (a) the California Department of Fish and Game (CDFG) with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological preserves, and other areas administered by the department; (b) the State Lands Commission with regard to state-owned “sovereign” lands such as the beds of navigable waters and state school lands; (c) the State Department of Parks and Recreation with regard to units of the State Park System; and (d) the University of California with regard to sites within the Natural Land and Water Reserves System” (14 CCR 15386).
Volume to Capacity Ratio (V/C)	The ratio of an intersection’s traffic volume (V) to its capacity (C), with capacity defined as the theoretical maximum number of vehicles that can pass through an intersection during a specified time period. When the V/C ratio is 1.0, traffic is considered to be “at capacity” and there is traffic congestion. A V/C ratio of 1.0 or more translates to an LOS F.
Wetland	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (United States Army Corps of Engineers [USACE] and EPA definition).

Engineering Terms

Abutment	Part of a bridge substructure. Refers to the first and last supports of a bridge.
Alkali-Silica Reaction	A reaction between reactive (amorphous) silica (in concrete aggregates) and an alkali (usually present in the cement), which results in the formation of a gel. This gel increases in volume with water and exerts expansive pressure on the concrete, causing failure of the concrete. (from Wikipedia)
Approaches	Part of bridge or bridges leading up to the main span.
Arch	A structural form utilizing a semicircular substructure.
Beam	A horizontal structure member supporting vertical loads by resisting bending.
Bent	Part of a bridge substructure. A single or multi-column frame commonly made of reinforced concrete or steel that supports a vertical load and is placed transverse to the length of a structure. Bents are commonly used to support beams and girders.
Bent cap	Refers to the horizontal element of a bent.
Cable-stayed	A variation of suspension bridge in which the tension members extend from one or more towers at varying angles to carry the deck. Allowing much more freedom in design form, this type does not use cables draped over towers, nor the anchorages at each end, as in a traditional suspension bridge.
Cast-in-place concrete girder	A concrete girder poured in the field in its final position.
Columns	Vertical supporting elements of a bridge.
Concrete box girder	A hollow concrete girder.
Deck	The portion of the superstructure in contact with vehicle tires.
Functionally obsolete	A structure including substandard components, such as older railing or sidewalk and having a roadway geometry that does not meet today's standards. A functionally obsolete bridge may be structurally sufficient, but unable to handle its current volume of traffic.
Girder	A girder is a larger beam.
Main span	Refers to the longest span of a bridge structure (usually significantly longer than other spans). Also refers to the portion of the structure spanning the longest distance.
Pier	A vertical support or substructure unit that supports the spans of a multi-span superstructure at an intermediate location between its abutments.
Piles	Long vertical steel or concrete elements drilled or driven deep into the ground to form part of a foundation. Piles are typically used in groups.
Pile Caps	A rectangular concrete element built on top of a group of piles. A column can be built above a pile cap.

Span	The distance between bents, piers, towers, or abutments.
Steel box girder	A hollow steel girder.
Steel casings	Steel pipe placed around another element for various applications.
Steel tied arch	Bridge built with a semicircular member over the deck, using the deck as a tie. This bridge usually involves cables connecting the deck to the arch.
Substructure	Any portion of a bridge structure below the superstructure, including abutments, columns, walls, and foundations that support the superstructure.
Superstructure	The portion of a bridge structure that carries the traffic load and transfers it to the substructure.
Tie-in	Location where approaches and main span meet.
Truss	A structural form that is used in the same way as a beam, but because it is made of a web-like assembly of smaller members, it can be made longer, deeper, and therefore, stronger than a beam or girder while being lighter than a beam of similar dimensions.

Appendix F
Mitigation Monitoring and Reporting Program

Appendix F Mitigation Monitoring and Reporting Program

This mitigation monitoring and reporting program (MMRP) has been prepared pursuant to State of California Public Resources Code (PRC) Section 21081.6, which requires adoption of a reporting and monitoring program for projects in which the lead agency has required changes or adopted mitigation to avoid significant environmental effects. The MMRP is also a part of the fulfillment of Title 23, Code of Federal Regulations (CFR) Part 635.309(j). Specific reporting or monitoring requirements to be enforced during project implementation must be defined prior to final approval of the project proposal by the decision makers.

This MMRP identifies responsible parties and provides guidelines for implementation and reporting for all mitigation measures outlined in the joint Final Environmental Impact Report/Environmental Impact Statement and Section 4(f) Evaluation for 6th Street Viaduct Seismic Improvement Project, dated October 2011 (FEIR/EIS).

A. Responsible Party

The City of Los Angeles is the CEQA lead agency. The Department of Public Works, Bureau of Engineering (BOE) has responsibility for construction management and oversight, and the assurance that mitigation measures are implemented by designated and qualified personnel, which may include design and construction contractors. Therefore, BOE will also be responsible for monitoring and reporting on the mitigation measures in this MMRP. In addition, the California Department of Transportation (Caltrans), assuming responsibility as federal lead agency, will be responsible for oversight to ensure that the mitigation measures are implemented.

B. Mitigation Requirements

The analysis in the EIR/EIS assumes that, unless otherwise stated, the project will be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards (e.g., *Los Angeles Municipal Code* and *Bureau of Engineering Standard Plans*). Also, this analysis assumes that construction will follow the uniform practices established by the Southern California Chapter of the American Public Works Association (e.g., *Standard Specifications for Public Works Construction* and the *Work Area Traffic Control Handbook*) as specifically adapted by the City of Los Angeles (e.g., *The City of Los Angeles Department of Public Works Additions and Amendments to the Standard Specifications For Public Works Construction* (AKA "The Brown Book," formerly Standard Plan S-610)).

A total of 23 individual mitigation measures that are not part of applicable laws or City-adopted standards are required to be undertaken to mitigate the potentially significant impacts and

unavoidable adverse effects associated with this project. These mitigation measures are presented in Table 1.

C. Schedule and Reporting Frequency

Implementation and monitoring of mitigation tasks, as outlined in Table 1, will be documented in the Mitigation Monitoring Report form (see Exhibit A), which will be issued by LABOE Environmental Management Group (EMG) to the party responsible for task implementation. These forms will be used to demonstrate and document compliance with PRC Section 21081.6 and 23 CFR 635.309(j), and will be completed by those having designated responsibility for mitigation implementation and monitoring. Completed forms shall be submitted to EMG for verification and filing as soon as each mitigation task is completed, or reaches a designated completion milestone. Retained mitigation monitoring reports will be made available to the public for a period of five (5) years following completion of the project. Duplicate copies of certified forms will also be retained in the City's archives together with the 'as-built' drawings for this project.

Table 1. Mitigation Implementation, Scheduling, and Reporting

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
1	Conduct a public outreach program to keep residents, businesses, utility service providers, emergency service providers (including Fire and Police Departments) within the project area informed of the project construction schedule, demolition plan, material hauling plan, relocation plans and assistance programs, traffic-impacted areas, and the Traffic Management Plan (TMP) and other relevant project information.	Community Values Cumulative Effects (MM 3-1)	<ol style="list-style-type: none"> 1. Engage a public outreach consultant to develop a public outreach program for implementation during preconstruction and construction phases. The Plan may include, but not limited to, organization of community meetings, publication of newsletters, creation and maintenance of a public website, and establishment of telephone hotlines. 2. Conduct periodic community meetings to provide project updates during final design phase. 3. Notify affected property owners, area residents, emergency service providers, and public service providers of scheduled demolition and construction activities at least two weeks in advance. 4. Make available the demolition plan and material hauling plan for public access and review. 5. Post project information signage at the construction zone at least one month before scheduled demolition and construction dates. 6. Issue quarterly project updates to affected property 	<ol style="list-style-type: none"> 1. Final Design 2. Final Design 3. Prior to demolition 4. Prior to demolition 5. Prior to demolition and construction 6. During demolition and construction 	<ol style="list-style-type: none"> 1. LABOE BIP 2-4. Design Consultant, Public Outreach Consultant, LABOE Public Affairs Office 5. LABOE Construction Manager 6. Public Outreach Consultant, LABOE Public Affairs Office 	1-6. Records of compliance kept on file at LABOE BIP.	1-6 LABOE EMG

¹ Mitigation measures presented in the EIR/EIS is provided in the parenthesis for reference.

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
			owners and area residents.				
2	Require the construction contractor to submit the means and methods for demolition for LABOE review and approval. During the demolition period, construction inspectors shall ensure the contractors adhere to the approved plan.	Community Values (MM 3-2)	<ol style="list-style-type: none"> 1. Prepare general mean and method requirements for demolition work so as to minimize impacts to nearby businesses and include them in the bid & specifications package. 2. Review and approve the plan submitted by construction contractor. 3. Ensure the construction contractor adheres to the approved demolition plan. 	<ol style="list-style-type: none"> 1. Final Design 2. Prior to demolition 3. During demolition 	<ol style="list-style-type: none"> 1. Design Consultant 2. LABOE BIP 3. LABOE Construction Manager 	<ol style="list-style-type: none"> 1. General requirements established and included in the bid package. 2. Approved plan kept at LABOE BIP 3. Record of compliance kept on file at LABOE BIP 	1-3. LABOE EMG
3	Participate in ongoing meetings with the LABOE Los Angeles River Project Office (LARPO) to implement elements of the Los Angeles River Revitalization Master Plan (LARRMP) related to Greening Concept objectives to improve the area near the 6 th Street Viaduct and provide potential future connections to the river corridor from the viaduct. In addition to LARPO, meetings will include, but are not limited to, the Planning Department, the Recreation and Parks Department, and the Community Redevelopment Agency.	Community Values Visual Resources Cumulative Effects (MM 3-3)	1. Designated staff of LABOE to attend appropriate planning meetings to provide input on possible design changes/ enhancement to the new viaduct and connecting roadway to accommodate desired features proposed by relevant planning agencies.	1. Throughout the design phase, construction, and post-construction as applicable	1. LABOE BIP	1. Minutes of meetings kept on file at LABOE.	1. LABOE EMG
4	Provide improvements to enhance the aesthetics and pedestrian safety of 11 out of 13 affected intersections along the proposed detour routes that could not be mitigated. Types of improvements would be developed with public input and using context sensitive design solutions, and may include but not be limited to the following: decorative crosswalk with community theme; raised	Community Values/ Environmental Justice Visual Resources (MM 3-4)	<ol style="list-style-type: none"> 1. Include proposed improvements at the following intersections as part of the Traffic Detour Plan: <ul style="list-style-type: none"> • 3rd Street and Alameda Street • 7th Street and Alameda Street • Whittier Boulevard and 	<ol style="list-style-type: none"> 1. Final Design 2. Prior to the commencement of detour plan 	<ol style="list-style-type: none"> 1. Design Consultant 2. Construction contractor 	<ol style="list-style-type: none"> 1. Improvements to affected intersections approved by LADOT 2. Construction completed and accepted by LADOT 	<ol style="list-style-type: none"> 1. LABOE EMG 2. LADOT

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	median with hardscape treatment where space allows.		Soto Street <ul style="list-style-type: none"> • 7th Street and Santa Fe Avenue • 4th Street-Pecan Street and US 101 Southbound off-ramp • 4th Street and US 101 Southbound off-ramp • 4th Street and US 101 Northbound off-ramp • 7th Street and Soto Street • 4th Street and Boyle Avenue • 4th Street and I-5 NB On/Off-Ramps/Cumming Street • 7th Street and Boyle Avenue. 2. Construct street improvements per approved plan.				
5	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 shall identify and provide alternate traffic detour routes, construction materials hauling routes, bus stops, shortest alternate transit routes and operation hours, alternative pedestrian routes, alternative bicycle routes, and residential and commercial access routes to be used during the	Community Values Traffic and Transportation/Pedestrian Facilities Cumulative Effects (MM 3-5)	1. Prepare construction staging plan and TMP 2. Include requirements in bid & contract specifications. 3. Implement the approved plan. 4. Provide a telephone hotline to receive comments and concerns from affected parties about construction activities.	1-2. Final Design 3. During demolition and construction activities 4. During demolition and construction	1-2. Design Consultant 3. LADOT 4. LABOE Construction Manager	1-4. Records of compliance kept on file at LABOE BIP and LADOT.	1-2. LABOE EMG 3. LADOT 4. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	construction period.						
6	Inform event organizers in the Boyle Heights and Downtown Arts District communities of the construction schedule to avoid any conflicts in the use of areas near the 6 th Street Viaduct for any festive events.	Community Values (MM 3-6)	1. Engage a public outreach consultant to develop a public outreach program for implementation during preconstruction and construction phases. The Plan may include, but not limited to, organization of community meetings, publication of newsletters, creation and maintenance of a public website, and establishment of telephone hotlines. 2. Conduct periodic community meetings to provide project updates during final design phase.	1. Final Design 2. Final Design	1. LABOE BIP 2. Design Consultant, Public Outreach Consultant, LABOE Public Affairs Office5.	1. Records of compliance kept on file at LABOE BIP.	1-2 LABOE EMG
7	If homeless people were found within the construction site, the Los Angeles Homeless Services Authority (LAHSA) would be contacted to provide services to those affected prior to construction.	Community Values/ Environmenta l Justice (MM 3-7)	1. Survey the construction area. If homeless people are found within the area, then contact LAHSA to provide service to them.	1. Prior to demolition and construction	1. Construction Contractor	1. Records of compliance kept on file at LABOE BIP.	1-2 LABOE EMG
8	Require the construction contractor to install new traffic signals at the intersection of 4 th Street and US 101 SB On- and Off-Ramps, and connect to Los Angeles City ATSAC system.	Traffic and Transportation/ Pedestrian Facilities (MM 3-8)	2. Include the required traffic signal features into the roadway design 3. Install the traffic signal per the approved plan	2. Roadway Final Design 2. Construction phase	1. Design Consultant 2. Construction contractor	1. Design reviewed and approved by LADOT 2. Construction completed and accepted by LABOE	1. LABOE EMG 2. LABOE BIP
9	Require the construction contractor to restripe to add an eastbound right-turn lane at the intersection of 4 th Street and Soto Street.	Traffic and Transportation/ Pedestrian Facilities (MM 3-9)	1. Include the required intersection striping features into the roadway design 2. Restripe the roadway per the approved plan	1. Roadway Final Design 2. Construction Phase	1. Design Consultant 2. Construction Contractor	1. Design reviewed and approved by LADOT 2. Construction completed and accepted by LABOE	1. LABOE EMG 2. LABOE EMG
10	Establish an Aesthetics Advisory Committee (AAC) to provide input and advice throughout the design	Visual Resources	1. Formation of AAC 2. Conduct AAC meetings/	1-2 Final Design	1-2 Design Consultant	1-2. Minutes of workshops kept on file at LABOE BIP.	1-2. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	<p>period of the project, including input on bridge aesthetics for the new structure and associated roadways under improvement within the scope of this project. The AAC will participate in design review meetings and provide input on selected design elements including, but not limited to, colors, textures, lighting, railings, and community/City gateway monumental elements.</p>	(MM 3-10)	workshops to solicit input on design elements				
11	<p>Prior to the start of any work that could adversely affect any characteristics that qualify the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) as a historic property, contact the National Park Service Western Region Office (NPS) in Oakland, California, to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. The City shall provide NPS 30 days to respond to their additional recordation determination request. If additional documentation is required, Caltrans shall ensure that the additional documentation is completed and accepted by NPS before the Viaduct is altered and/or demolished. The City shall prepare draft and final reports to be reviewed by NPS.</p>	<p>Cultural Resources (MM 3-11)</p>	<p>1. Engage a qualified architectural historian consultant to coordinate with NPS and prepare required documents per NPS requirements. 2. Submit approved documents to SHPO.</p>	<p>1. Final Design 2. Construction Phase</p>	1-2 LABOE BIP	<p>1. HAER documentation reviewed and approved by NPS. 2. A copy of transmittal letter to SHPO kept on file at LABOE BIP and Caltrans.</p>	1-2. LABOE EMG
12	<p>Upon completion, copies of the HAER documentation prescribed in Mitigation Measure 3-9, consisting of an acid-free xerographic copy of the report, prepared on standard 8 ½ X 11 paper, shall be retained by</p>	<p>Cultural Resources (MM 3-12)</p>	<p>1. Reproduce and mail approved HAER documentation to designated recipients. 2. Submit activity completion report to SHPO.</p>	<p>1. After HAER documentation is approved by NPS. 2. Prior to viaduct demolition</p>	<p>1. Design Consultant 2. LABOE BIP</p>	<p>1. Transmittal letter kept on file at LABOE BIP. 2. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans.</p>	1-2. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	Caltrans District 7, deposited in the Caltrans Transportation History Library in Sacramento, and offered by the City to, at a minimum, the Los Angeles Public Library, Los Angeles Conservancy, Los Angeles City Historical Society, Historical Society of Southern California, City of Los Angeles Office of Historical Resources, and the California Office of Historic Preservation.						
13	Work with the Los Angeles Public Library to place the historical information from the HABS/HAER report on a City website with a link to a public library website, such as the Los Angeles Public Library website, available to the public for a minimum period of three years. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their website.	Cultural Resources (MM 3-13)	<ol style="list-style-type: none"> 1. Post an electronic copy of approved HABS/HAER documentation on the City website and provide the link to various designated libraries. 2. Submit activity completion report to SHPO. 	<ol style="list-style-type: none"> 1. After HABS/HAER documentation is approved by NPS. 2. Prior to viaduct demolition 	<ol style="list-style-type: none"> 1. LABOE Information System Department 2. LABOE BIP 	<ol style="list-style-type: none"> 1. A copy of transmittal letter kept on file at LABOE BIP. 2. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans. 	1-2. LABOE EMG
14	Produce a documentary (motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the broader contextual history of the City of Los Angeles. The motion picture or video shall be of broadcast quality, between 30- and 90-minute duration, and shall be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries; one copy shall be submitted to the Caltrans Transportation Library and History Center at Caltrans	Cultural Resources (MM 3-14)	<ol style="list-style-type: none"> 1. Engage a qualified consultant to prepare the documentary motion picture or video. 2. Submit a story board for review and approval by LABOE, Cultural Heritage Commission, City Cultural Affairs, Caltrans, and SHPO 3. Submit the draft documentary video for review and approval by Caltrans, City Board of Public Works, and SHPO. 4. Distribute the approved documentary video to local broadcast stations and other 	1-5. Final design (Note: Period of implementation may extend to cover demolition, construction, and opening ceremony activities, depending upon the approved story board for the documentary.)	<ol style="list-style-type: none"> 1. LABOE BIP 2. Design Consultant 3. Design Consultant 4. LABOE BIP 5. LABOE BIP 	<ol style="list-style-type: none"> 1. Record of compliance kept on file at LABOE BIP. 2-4 A copy of transmittal letters and correspondence with relevant agencies kept on file at LABOE BIP. 5. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans. 	1-5 LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	Headquarters in Sacramento.		specified sources. 5. Submit activity completion report to SHPO.				
15	Produce and publish a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and this bridge's place in that history. The booklet shall be similar in general format to the "Historic Highway Bridges of California" published by the California Department of Transportation (1991) and shall include high quality black and white images of the Los Angeles River Bridges, historic photographs or drawings, as appropriate and text describing each of the bridges' location, year built, builder, bridge type, significant character-defining features and its historic significance. City shall post an electronic version of the booklet on a City website and produce paper copies for distribution to local libraries, institutions and historical societies. One copy shall be submitted to the Caltrans Transportation Library and History Center in Sacramento. City shall maintain the camera-ready master booklet and produce additional copies if there is demand	Cultural Resources (MM 3-15)	<ol style="list-style-type: none"> 1. Engage a qualified consultant to prepare the historic monumental bridge booklet. 2. Submit an outline of the booklet for review and approval by LABOE, Cultural Heritage Commission, Cultural Affairs Department, Caltrans, and SHPO. 3. Submit the draft booklet for review and approval by Caltrans, City Board of Public Works, and SHPO. 4. Distribute the approved booklet to specified recipients. 5. Post an electronic version of the approved booklet on the City website and provide the link to various designated libraries. 6. Submit activity completion report to SHPO. 	1-6. Final design through bridge opening day.	<ol style="list-style-type: none"> 1. LABOE BIP 2. Design Consultant 3. Design Consultant 4. LABOE BIP 5. Information System Department 6. LABOE BIP 	<ol style="list-style-type: none"> 1. Record of compliance kept on file at LABOE BIP. 2-4 A copy of transmittal letters and correspondence with relevant agencies kept on file at LABOE BIP. 5. Electronic version of booklet posted on City website 6. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans. 	1-6. LABOE EMG
16	Install two freestanding informative permanent metal plaques or signage at both ends of the viaduct, at public locations, that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced.	Cultural Resources (MM 3-16)	<ol style="list-style-type: none"> 1. Incorporate the required features in project design. 2. Submit the design for review and approval by LABOE, Cultural Heritage Commission, Cultural Affairs Department, Caltrans, and SHPO. 	1- 4. Final Design	<ol style="list-style-type: none"> 1. Design Consultant 2. LABOE BIP 3. Design Consultant 4. LABOE BIP 	<ol style="list-style-type: none"> 1-3 Record of compliance kept on file at LABOE BIP. 4. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans. 	1-4. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
			3. Include the approved design in bid & specification package. 4. Submit activity completion report to SHPO.				
17	Offer artifacts removed from the viaduct during demolition to local museums, or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations.	Cultural Resources (MM 3-17)	1. Include specific requirements in bid & specification package. 2. Notify interested parties of the availability of artifacts. 3. Coordinate with construction contractor to schedule artifact pick-up. 4. Submit activity completion report to SHPO.	1. Final Design 2. Prior to demolition of the viaduct 3-4. During demolition of the viaduct	1. Design Consultant 2. Design Consultant 3. LABOE Construction Manager 4. LABOE BIP	1-3. Record of compliance including a copy of offer letters kept on file at LABOE BIP. 4. A copy of progress report to SHPO kept on file at LABOE BIP and Caltrans.	1-4. LABOE EMG
18	Establish an Environmentally Sensitive Area (ESA) Action Plan, which will include fencing of site no. LAN 19-003683, archaeological and Native American monitoring during ground-disturbing activities, and training of construction workers.	Cultural Resources (MM 3-18)	1. Include specific requirements in bid & specification package. 2. Notify the Gabrieleno Band of Mission Indians representative to monitor the site during excavation of the viaduct footings. 3. Engage a qualified archeologist. 4. Conduct archaeological monitoring of the site during ground-disturbing activities.	1. Final design 2. Prior to ground-disturbing activities 3. During ground-disturbing activities	1. Design Consultant 2-3. LABOE BIP 4. Archaeological Consultant	1. ESA established 2-3. A copy of notification letter to the Gabrieleno Band of Mission Indians kept on file at LABOE BIP. 4. Monitoring report prepared and signed by a qualified archeologist and/or Native American monitor kept on file at LABOE BIP.	1-2 LABOE EMG
19	Retain a qualified paleontologist to develop and implement a Paleontological Monitoring Plan (PMP). Conduct paleontological monitoring onsite to inspect new exposures created by earth-moving activities in areas underlain by the older alluvium (area east of US 101) and at depths greater than 5 ft below current grade for the younger alluvium.	Paleontology (MM 3-19)	1. Engage a qualified paleontologist to prepare a PMP for implementation during ground-disturbing activities. 2. Include specific requirements of the PMP in bid & specification package. 3. Monitor the site during soil disturbing activities.	1-2. Final design 3. During ground-disturbing activities	1. LABOE BIP 2. Design Consultant 3. Paleontological Consultant	1. Record of compliance kept on file at LABOE BIP. 2. Specific requirements included in bid and specification package. 3. Monitoring report prepared and signed by a qualified paleontologist kept on file at LABOE BIP	1-3. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
20	<p>To the extent applicable, implement fugitive dust source controls by requiring the contractor to:</p> <ul style="list-style-type: none"> • Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to active and inactive sites during workdays, weekends, holidays, and windy conditions. • Install wind fencing and phase grading operations, where appropriate, and operate water trucks for stabilization of surfaces under windy conditions. 	<p>Air quality (MM 3-20)</p>	<ol style="list-style-type: none"> 1. Include the requirements in bid and specification package. 2. Monitor to ensure the contractor complies with the requirements. 	<ol style="list-style-type: none"> 1. Final design. 2. During demolition and construction 	<ol style="list-style-type: none"> 1. Design Consultant 2. LABOE Construction Manger 	<p>1-2. Record of compliance kept on file at LABOE BIP.</p>	<p>1-2. LABOE EMG</p>
21	<p>To the extent applicable, implement mobile and stationary source controls by requiring the contractor to:</p> <ul style="list-style-type: none"> • Reduce use, trips, and unnecessary idling from heavy equipment. • Maintain and tune engines per manufacturer’s specifications to perform at EPA certification levels, where applicable, and at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. • Prohibit any tampering with engines and adhere to manufacturer’s recommendation. • Lease new and clean equipment 	<p>Air quality (MM 3-21)</p>	<ol style="list-style-type: none"> 1. Include the requirements in bid and specification package. 2. Monitor to ensure the contractor complies with the requirements. 	<ol style="list-style-type: none"> 1. Final design 2. During demolition and construction 	<ol style="list-style-type: none"> 1. Design Consultant 2. LABOE Construction Manager 	<p>1-2. Record of compliance kept on file at LABOE BIP.</p>	<p>1-2. LABOE EMG</p>

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	meeting the most stringent of applicable federal and state standards, if practicable. <ul style="list-style-type: none"> • Utilize EPA-registered particulate traps and other appropriate controls, where suitable, to reduce emissions of particulate matter and other pollutants at the construction site. 						
22	To the extent applicable, implement administrative controls by requiring its staff to: <ul style="list-style-type: none"> • Require the contractor to prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) • Use alternative fuels such as natural gas and electric, where appropriate. • Develop a construction traffic and parking management plan that minimizes interference and maintains traffic flow as part of the TMP. 	Air quality (MM 3-22)	1. Include the requirements in bid and specification package. 2. Monitor to ensure the contractor complies with the requirements.	1. Final design. 2. During demolition and construction	1. Design Consultant 2. LABOE Construction Manager	1-2. Record of compliance kept on file at LABOE BIP.	1-2. LABOE EMG
23	Prevent possible damage and injury to migratory birds by scheduling the removal of vegetation (whether	Biological Resources	1. Schedule non-native ornamental vegetation removal between September	1-4. Pre-construction period.	1. LABOE Construction Manager	1-2. Record of compliance kept on file at LABOE BIP.	1-5. LABOE EMG

No.	Mitigation Measure	Affected Resource(s) ¹	Implementation Task(s)	Schedule of Implementation	Implementation Responsibility	Record of Implementation	Verification and Record Keeping
	<p>native or horticultural landscaping) in the project area between September 1 and January 31. If initial vegetation removal and ground clearance cannot be avoided between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey of trees and shrubbery for active nests. If active nests of migratory species occur within the construction area, then a temporary exclusion fence 50 feet in diameter shall be assembled around the nest. The biologist shall then monitor the site of active nests during the construction activities. Once the biologist determines chicks have fledged or parents have abandoned the nest, the temporary fence can be removed and construction in such area can proceed. If bats are found, bat proofing (exclusion) will occur outside of the breeding season (October 30 through March 1) after juvenile bats have learned to fly; exclusion will be staged to ensure that roosting sites in areas not currently under construction will be available at all times during the project to minimize the potential effects on bats.</p>	(MM 3-23)	<ol style="list-style-type: none"> 1 and January 31. 2. Engaged a qualified biologist to conduct a preconstruction survey 3. Conduct a preconstruction survey 4. If the active nest is found, direct the construction contractor to install an exclusion fence. 5. Monitor the active nest during construction activities until the chicks have fledged. 	5. During construction activity that occurs near the active nest location.	2 LABOE BIP 3-5. Biological Consultant	3-5. A survey report kept on file at LABOE.	

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Exhibit A
Mitigation Monitoring Report Form

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MITIGATION MONITORING REPORT

SECTION 21081.6 PUBLIC RESOURCES CODE

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS 221 N. FIGUEROA STREET, SUITE 350		MITIGATION NO. _____	
5.1.1 Los Angeles, CALIFORNIA 90012		Page ____ of ____	
Project 5.2 6th Street Viaduct Seismic Improvement Project		Location 6 th Street Over Los Angeles River between Mateo Street and West of Interstate 5	
Mitigation Description:		Implementation Responsibility:	
Implementation Task:		Implementation Schedule:	
Record of Implementation:		Start Date	Complete Date
Remarks:			
The information contained in this report is an independent evaluation based on my personal observations and information provided to me. In accordance with Section 21081.6 of the California Public Resources Code, I hereby certify under penalty of perjury that the information contained herein is true and correct to the best of my knowledge. Name of Person Completing Form _____ Title _____ Signature _____ Date Signed _____			
VERIFICATION: Form Received by: _____ Signature: _____ Title: _____ Department/Division: _____ Date Rec'd: _____			
Compliance Acceptance: <input type="checkbox"/> Yes <input type="checkbox"/> No		Mitigation Completed: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Attach additional sheets if necessary.

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Appendix G
List of Acronyms and Abbreviations

Appendix G List of Acronyms and Abbreviations

AADT	average annual daily traffic
AAM	annual arithmetic mean
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
AC	Advanced Construction
ACHP	Advisory Council on Historic Preservation
ACMs	asbestos-containing materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily traffic
AEP	Association of Environmental Professionals
AIR	Artists-in-Residence
ARB	Air Resources Board
APE	area of potential effects
AQMP	Air Quality Management Plan
ASR	Alkali Silica Reaction Archaeological Survey Report
ASTM	American Society for Testing and Materials
ATSAC	Automated Traffic Surveillance and Control
bgs	below ground surface
BHNC	Boyle Heights Neighborhood Council
BID	Business Improvement District
BMPs	best management practices
BNSF	Burlington Northern Santa Fe
°C	degrees Celsius
CAA	Clean Air Act
CAAs	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CAC	Community Advisory Committee
Cal-IPC	California Invasive Plant Council

Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Act of 1980 Information Systems
CESA	California Endangered Species Act
CFR	<i>Code of Federal Regulations</i>
cfs	cubic feet per second
CGS	California Geological Survey
CHL	California Historical Landmarks
CHRI	California Historic Resources Inventory
CHRIS	California Historical Resources Information System
CIP	cast-in-place
City	City of Los Angeles
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
COM	commercial
CPHI	California Points of Historical Interest
CRA/LA	Community Redevelopment Agency of the City of Los Angeles
CRHR	California Register of Historical Resources
CTC	California Transportation Commission
CWA	Clean Water Act
dB	decibel

dBa	A-weighted decibel
D/C	demand-to-capacity (ratio)
DE	diesel exhaust
DLANC	Downtown Los Angeles Neighborhood Council
DOT	United States Department of Transportation
DPM	diesel particulate matter
DRIR	Draft Relocation Impact Report
EB	eastbound
EBL	Eligible Bridge List
EFS	Environmental FirstSearch
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ERNS	Emergency Response and Notification System
ESA	environmentally sensitive area
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIMAP	Fire Insurance Map
FINDS	Facility Index System
FOE	Finding of Effect
FRA	Federal Railroad Administration
ft	feet/foot
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	geographic information system
GWP	global warming potential
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HAPs	hazardous air pollutants
HBP	Highway Bridge Program

HCM	Historic-Cultural Monument
HHS	U.S. Department of Health and Human Services
HMIRS	Hazardous Material Incident Report System
HPSR	Historic Property Survey Report
HRER	Historical Resources Evaluation Report
HSSC	Historical Society of Southern California
Hz	hertz
I-5	Interstate 5
I-10	Interstate 10
IGR	Intergovernmental Review
ILUP	Industrial Land Use Policy
IPCC	Intergovernmental Panel on Climate Change
IRIS	Integrated Risk Information System
ISA	Initial Site Assessment
ISTEA	Intermodal Surface Transportation Efficiency Act
kV	kilovolt
LAANE	Los Angeles Alliance for a New Economy
LABOE	City of Los Angeles Bureau of Engineering
LAC	Los Angeles Conservancy
LACDA	Los Angeles County Drainage Analysis
LACDPW	Los Angeles County Department of Public Works
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LARRMP	Los Angeles River Revitalization Master Plan
LBP	lead-based paint
lbs/day	pounds per day
LBSRA	Local Bridge Seismic Retrofit Account
L_{eq}	equivalent sound level
L_{max}	maximum sound level
LOS	level of service

L _P	sound pressure level
LST	localized significance threshold
LT	long-term
L _x	percentile exceeded sound level
MCE	maximum credible earthquake
MFR	multiple-family residential
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
µg/L	micrograms per liter
mg/m ³	milligrams per cubic meter
µg/m ³	micrograms per cubic meter
MIBK	4-methyl-2-pentanone
MLD	most likely descendent
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization
MSATs	mobile source air toxics
msl	mean sea level
MTA	Metropolitan Transportation Authority
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NATA	National Air Toxics Assessment
NB	northbound
NCDB	National Compliance Database System
NCPP	New Community Plan Program
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act of 1966

NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NOS	North Outfall Sewer
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NRHP	National Register of Historic Places
O ₃	ozone
PA	Programmatic Agreement
PADS	Polychlorinated Biphenyls Activity Data System
Pb	lead
PBA	peak bedrock acceleration
PCBs	polychlorinated biphenyls
PDT	Project Development Team
PGA	peak ground acceleration
PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
PMP	Paleontological Mitigation Plan
ppm	parts per million
POAQC	Projects of Air Quality Concern
PQS	professionally qualified staff
PPV	peak particle velocity
PRC	Public Resources Code
PRG	preliminary remediation goal
RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act of 1976

RCRA COR	Resource Conservation and Recovery Correction Action Site
RCRA GEN	Resource Conservation and Recovery Generators
RCRA NLR	Resource Conservation and Recovery Sites
RCRA TSD	Resource Conservation and Recovery Treatment, Disposal, and Storage Site
REC	recognized environmental condition recreational
REG UST/AST	Registered Underground Storage Tank/Aboveground Storage Tank
ROW	right-of-way
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	southbound
SCAB or Basin	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCH	school
SCRRA	Southern California Regional Rail Authority
SFR	single-family residential
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SRA	source receptor area
ST	short-term
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SVOCs	semivolatile organic compounds
SWL	solid waste landfill
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TACs	toxic air contaminants
TCMs	Transportation Control Measures
TCWG	Transportation Conformity Working Group
TDM	Transportation Demand Management
TDS	total dissolved solids
TMP	Traffic Management Plan
TOG	total organic gas
TPH	total petroleum hydrocarbon
TRIS	Toxic Release Inventory System
TSM	Transportation System Management
TTLC	total toxic limit concentration
UPRR	Union Pacific Railroad
US 101	Hollywood Freeway
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
V/C	volume to capacity ratio
VMT	vehicle miles traveled
VOC	volatile organic compound
WATCP	Work Area Traffic Control Plan
WB	westbound

Appendix H References

Appendix H References

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Appendix I
List of Technical Studies

Appendix I List of Technical Studies (bound separately)

- Air Quality Technical Report, 2008 and updated 2011.
- Archaeological Survey Report, 2008 and validated 2011.
- Community Impact Assessment, 2008 and updated 2011.
- Final Relocation Impact Report, 2010 and updated 2011.
- Final Project Report/Environmental Document Phase Foundation Report, May 2011.
- Historic Property Survey Report, 2008 and validated 2011.
- Historical Resources Evaluation Report, 2007 and validated 2011.
- Hydrology and Hydraulics Report, 2008 and updated 2011.
- Initial Site Assessment, 2008 and validated 2011.
- Natural Environment Study, 2007 and updated 2009 and 2011.
- Noise Study Report, 2009 and validated 2011.
- Paleontological Study, 2009 and validated 2011.
- Site Investigation Report, 2008 and validated 2011.
- Asbestos and Lead-Based Paint Survey, May 2009.
- Traffic Analysis Report, 2008.
- Traffic Analysis Report Validation Findings Technical Memorandum. February 2011.
- Visual Impact Assessment, 2008 and updated 2011.

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Appendix J
Section 6002 Coordination Plan

**SAFETEA-LU 6002 COORDINATION PLAN
6TH STREET VIADUCT IMPROVEMENT PROJECT**



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Section 1. Lead/Cooperating/Participating Agencies

As one of the requirements under Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Act: a Legacy for Users (SAFETEA-LU), all transportation projects requiring an EIS, for which the original Notice of Intent was published in the Federal Register after August 10, 2005, must have a plan established for coordinating public and agency participation and comment during the environmental review process. It is the responsibility of the lead agencies to develop the coordination plan to facilitate and document the interaction between the lead agencies and participating and cooperating agencies and the public.

As of July 1, 2007, California Department of Transportation (Caltrans) has assumed Federal Highway Administration's (FHWA) authority and responsibility for compliance with NEPA and other environmental laws. *The Memorandum of Understanding (MOU) between the Federal Highway Administration and California Department of Transportation concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program* allows Caltrans to serve as the Federal lead agency on this project.

Appendix A, the original list of the federal, state and local agencies that were invited to become Cooperating and Participating agencies, is attached at the end of the plan. On July 26, 2007, federal, state and local agencies were sent an invitation letter asking to become Cooperating and Participating agencies for this project.

In response to the invitation letter, no cooperating agencies were identified. In addition, below is a list of agencies that agreed to be participating agencies in the environmental review process.

1.1 Agency Definitions and List of Agencies

Federal Lead Agency: The agency conducting the NEPA analysis.

Federal Lead Agency	Contact Person/Title	Phone/Email
California Department of Transportation (Caltrans) 100 South Main Street Mail Stop 16A Los Angeles, CA 90012	Carlos Montez Senior Environmental Planner	(213) 897-9116 Carlos_Montez@dot.ca.gov
	David Lewis Environmental Planner	(213) 897-2860 David_Lewis@dot.ca.gov

Cooperating Agencies: Federal agencies, other than the Federal Lead Agency, who have jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. Cooperating agencies are also participating agencies.

No cooperating agencies were identified for this project.

Participating Agencies: Federal, state, regional or local agencies that have an interest in the project.

Participating Agencies	Contact Person/Title	Phone/Email/Address
United States Army Corps of Engineers	Theodore Masigat Engineering Division, Operations, Los Angeles District	(213) 452-3393 theodore.j.masigat@usace.army.mil 915 Wilshire Blvd Los Angeles, CA 90017

Participating Agencies	Contact Person/Title	Phone/Email/Address
United States Army Corps of Engineers	Phuong Trinh Regulatory Division, Los Angeles District	(213) 452-3372 Phuong.h.trinh@usace.army.mil 915 Wilshire Blvd Los Angeles, CA 90017
*United States Army Corps of Engineers	Gabe Brooks Right-of-Way Division, Los Angeles District	915 Wilshire Blvd Los Angeles, CA 90017
*United States Army Corps of Engineers	Ken Wong Permits, Los Angeles District	915 Wilshire Blvd Los Angeles, CA 90017
United States Environmental Protection Agency	Susan Sturges Environmental Review Office Community and Ecosystems Division	(415) 947-4188 sturges.susan@epa.gov 75 Hawthorne Street San Francisco, CA 94105
Advisory Council on Historic Preservation	Carol Legard Federal Highway Liaison Office of Federal Agency Programs	(202) 606-8522 clegard@achp.gov 1100 Pennsylvania Avenue NW Suite 809 Old Post Office Bldg Washington DC 20004
*US Department of Housing and Urban Development Los Angeles Field Office	William Vasquez, CPD Field Office Director	611 West 6 th Street, Suite 800 Los Angeles, CA 90017
*US Department of Commerce	Environmental Review Section	14 th and Constitution NW, Room 6800 Washington DC 20230
US Department of Homeland Security Federal Emergency Management Agency	Gregor Blackburn, CFM, Branch Chief Floodplain Management and Insurance Branch	(510) 627-7190 1111 Broadway, Suite 1200 Oakland, CA 94607-4052
*US Department of Energy Environmental Review Section	Environmental Review Section	1000 Independence Ave SW 4G-064 Washington DC 20585
*Federal Railroad Administration Office of Railroad Development	David Valenstein	400 Seventh St SW MS20 Washington DC 20590
City of Los Angeles Department of Parks and Recreation	David Attaway, Environmental Supervisor	(213) 928-9130 4155 S. Saint Louis Street Los Angeles, CA 90033
City of Los Angeles Bureau of Engineering Real Estate Group	Frank Viramontes, Chief Real Estate Officer II	(213) 485-5447 frank.viramontes@lacity.org Department of Public Works, Bureau of Engineering Real Estate Division 600 S. Spring Street, 7 th Floor, Stop 515 Los Angeles, CA 90014
Los Angeles County Metropolitan Transportation Authority	John C. Miller, P.E. Engineering Project Manager	(213) 922-2000 millerjo@mta.net 1 Gateway Plaza Mail Stop: 99-22-1 Los Angeles, CA 90012-2932
SCRRA—Metrolink	Laurene Lopez Community Relations/ Environmental Review Administrator	(213) 452-0288 lopezl@scrra.net SCCRA—Metrolink 700 South Flower Street, 26 th Floor Los Angeles, CA 90017

* Federal agency did not respond to the letter of invitation to become a participating agency.

Per SAFETEA-LU, a Federal agency invited shall be designated as a participating agency unless the agency declines the invitation by the deadline specified, and states that the agency (1) has no jurisdiction or authority with respect to the project, (2) has no expertise or information relevant to the project, and (3) does not intend to submit comments on the project.

1.2 Agency Expectations

The expectations for the Lead Agency are:

- Prepare the EIS in accordance with 23 CFR 771, 40 CFR 1500-1508 and SAFETEA-LU.
- Take actions necessary to facilitate the expedited review of the environmental review process.
- Identify and involve cooperating and participating agencies.
- Develop a coordination plan and provide the plan to participating and cooperating agencies.
- Provide, as early as practicable but no later than the appropriate project milestone, project information on purpose and need, environmental resources, alternatives and proposed methodologies.
- Provide oversight in managing the process and resolving issues.
- The Lead Agency (Caltrans) will have ultimate responsibility for:
 1. Review and adoption of a NEPA document.
 2. Implementation of design and mitigation commitments.

The expectations for Cooperating Agencies are:

- Timely review and comment on the pre-draft or pre-final environmental documents to reflect the views and concerns of your agency on the adequacy of the document, purpose and need statements, alternatives considered, and the anticipated impacts and mitigation. Written comments by email or letter should be submitted to Caltrans Environmental within allocated time frame.
- Identify as early as practicable any issue of concern regarding the projects environmental or socioeconomic impacts.
- Identify as early as practicable any issues that could substantially delay or prevent the granting of a permit or other approval needed for the project.
- Share information that may be useful to the lead agency (Caltrans), cooperating and participating agencies.
- Participate in coordination meetings and joint field reviews as appropriate.
- Assume on request of the lead agency (Caltrans) responsibility for developing information and preparing environmental analysis including portions of the EIS over which that cooperating agency has special expertise.
- May adopt without recirculating the EIS of the lead agency (Caltrans) when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.
- Make support staff available at the lead agency (Caltrans) request.
- Use own resources and funds.

The expectations for Participating Agencies are:

- Participation in the NEPA process starting at the earliest possible time, especially with regard to the development of the purpose and need statement, range of alternatives, methodologies, and the level of detail for the analysis of alternatives.
- Timely review and comment on the pre-draft or pre-final environmental documents to reflect the views and concerns of your agency on the adequacy of the document, purpose and need statements, alternatives considered, and the anticipated impacts and mitigation. Written comments by email or letter should be submitted to Caltrans Environmental within allocated time frame.
- Identify as early as practicable any issue of concern regarding the projects environmental or socioeconomic impacts.
- Identify as early as practicable any issues that could substantially delay or prevent the granting of a permit, delay completion of the environmental process, or other approval needed for the project.
- Share information that may be useful to the lead agency (Caltrans), cooperating and participating agencies.
- Provide input on purpose and need, methodologies, alternatives within 15 days of receipt thereof.
- Respond affirmatively in writing to the letter of invitation (for non-federal agencies) within 30 days of receipt.
- Respond in writing to the letter of invitation if you wish to decline the invitation (for federal agencies) within 30 days of receipt.
- Participate in coordination meetings and joint field reviews as appropriate.
- Participate as needed in Issues Resolution Process.
- Use own resources and funds.

Section 2. Agency Coordination

2.1 Coordination Points, Information Requirements and Responsibilities

Caltrans, as the lead agency, will adhere to the following coordination with Participating and Cooperating Agencies:

- Request for review of the project purpose and need (Response by the agencies to be provided within 15 days of receipt of project materials).
- Provide pertinent information about environmental and socioeconomic resources in the area. This information includes identification of resources located within project area and general location of alternatives, and will be provided by written correspondence or in a meeting. Agencies will identify any issues that could substantially delay permit or other approval needed for the project, and respond to the lead agency within 15 days of receipt of project materials.
- Review of the following information related to alternatives:
 1. Proposed range of alternatives
 2. Proposed methodologies for screening of alternatives
 3. Proposed Draft EIS alternatives
 4. Proposed Recommended Preferred Alternative

This information will be provided in meetings and/or by written correspondence. Responses will be provided to the lead agency about each of these within 15 days of receipt of project materials.

- Provide Pre-Draft EIS (Response to be provided within 30 days of receipt of project materials).

2.2 EIS Advisory Committee

A project EIS Advisory Committee, consisting of representatives from each of the Cooperating and Participating Agencies, will be formed to guide and oversee the process. The EIS Advisory Committee will make recommendations to the Lead Agency based on their roles and responsibilities as outlined above. The EIS Advisory Committee will be moderated by the lead agency. Participation in the committee will consist of attending relevant meetings and providing timely review and comment of the proposed project documentation and methodologies.

Section 3. Project Schedule

The following schedule is proposed:

Milestone	Initiation Date	Details
Purpose and Need	November 2007	EIS Cooperating/Participating Agency Meeting #1 (October 31 st , 2007): Caltrans provided the EIS Advisory Committee with draft purpose and need statement. Meeting also included discussion on the following topics: Description of roles and responsibilities of EIS Advisory Committee members, Coordination Plan, description of project and schedule, and discussion of purpose and need.
Range of Alternatives	November 2007	EIS Advisory Committee Meeting #1 (October 31 st , 2007): Caltrans provided the EIS Advisory Committee with information regarding alternatives being considered. Additionally, a description of the process and outcome of alignment and design alternatives proposed by the Project Development Team for further study including input from an expert panel and Community Advisory Committee (CAC).
Collaboration on impact assessment methodologies	February 2008	EIS Advisory Committee Meeting #2 (February 4, 2008): Caltrans discussed the technical studies being conducted and the level of detail required in the analysis of the alternatives.
Socioeconomic and environmental impacts	February 2008	EIS Advisory Committee Meeting #2 (February 4, 2008): Caltrans identified the resources located within project area and the general location of alternatives. EIS Advisory Committee will be asked to identify any issues that could substantially delay the project.
Alkali Silica Reaction Workshop and Project Alternative Analysis	October 2008	EIS Advisory Committee Meeting #3 (October 20, 2008): Caltrans discussed the project alternatives, ASR workshop and the environmental analysis results. Only one participating agency attended this meeting.
Circulation of DEIS	June 2009	Caltrans will provide the Draft EIS for review by written correspondence. The comment period is 60 days.
Agency Public Hearing	July 2009	Caltrans held an Agency Public Meeting on July 14, 2009 to discuss the release of the Draft EIS
2 Community Public Hearings	July 2009	Caltrans and the City of Los Angeles held 2 Public Meetings on July 14 th and July 21 st to discuss the release of the Draft EIS.
Selection of Preferred Alternative	October 2009	The PDT held a workshop after the close of the Draft EIR/EIS public comment period to identify a preferred alternative. Four alignments and seven bridge designs were considered. The evaluation for selecting the Bridge Structure and Alignment included criteria based on several factors. Sensitivity tests were then performed by weighting the scoring criteria from different perspectives, based on the anticipated interests of various groups of stakeholders. The PDT members concluded that Bridge Concept 4A on Alignment 3B is the preferred alternative. This is discussed in more detail in Chapter 2 of Final EIS.
Final EIS	Spring/Summer	Anticipated approval of the Final EIS is in Spring/Summer 2010
Record of Decision	Summer/Fall	Anticipated approval of the ROD is Summer/Fall 2010

Section 4. Issues Resolution Process

SAFETEA-LU provides a formal process for resolving serious issues that may delay the project or result in a denial of a required approval for the project. An issue of concern is any issue that could delay the project or could prevent an agency from granting a permit or other approval that is needed for the project. Resolution of the issue of concern means that the agencies involved agree on how to proceed so that they are able to reach decisions on matters within their authority.

The Lead Agency and the EIS Advisory Committee shall work cooperatively in accordance with this section to identify, as early as possible, any issues of concern. The following process will be followed:

- Meetings will be held as needed during the environmental review process to discuss and resolve issues notably during the scoping process, technical report review, and prior to the circulation of the Draft EIS.
- Initial correspondence and relevant comments and information on the purpose and need and alternatives analysis will be included in the 6th Street Viaduct Improvement Project Scoping Report.
- If issues are not resolved in a timely manner:
 1. The Federal Lead Agency (Caltrans) will contact relevant participating agencies to determine if any information necessary to resolve issue is lacking and obtain all the necessary information.
 2. Caltrans will schedule an official issues resolution meeting.
 3. If no resolution can be achieved within 30 days of the meeting, then
 4. Caltrans will draft notification including: project description, details of issue(s) that could not be resolved, names of agencies invited and that actually participated in meeting, date of meeting, and determination that resolution could not be reached.
 5. Caltrans will send notification to the heads of all Participating and Cooperating Agencies, the Governor, appropriate Senate and House Committees, and the Council of Environmental Quality.
 6. Caltrans will publish such notice in the Federal Register.

Section 5. Revision History

This section is reserved for changes to the Coordination Plan.

Version	Date	Name	Description
2 nd Version	1-29-08	Section 1.1 Agency Definitions and List of Agencies	Per response letter dated January 14, 2008 from the Army Corps of Engineers Regulatory Division, the Corps has declined the offer to become a participating/cooperating agency but has accepted to become a participating agency for this project. This supercedes the previous classification for the Corps' operations and regulatory sections as participating and cooperating agencies.
2 nd Version	1-29-08	Section 3 Project Schedule	The coordination plan meeting has been scheduled for February 4, 2008 at Caltrans, instead of January 2008 as was originally noted.
3 rd Version	2/23/09	Appendix A	We only list the participating agencies that accepted our invitation. In Appendix A, we are including a list of all the federal, state and local agencies that were originally invited to become a cooperating or participating agency.
3 rd Version	2/23/09	Project Schedule	Updated the target date for Draft EIR/EIS release to agencies and public for review and comment. Also changed the comment period to 60 days per Caltrans management decision.
4 th Version	July 2009	Project Schedule	Updated Project Schedule. Caltrans held 3 Public Hearings for the Draft EIR/EIS
5 th Version	October 2009	Project Schedule	The PDT held a workshop after the close of the Draft EIR/EIS public comment period to select a preferred alternative.
6 th Version	March 2010	Project Schedule	Anticipated approval for Final EIS and ROD.

Appendix A
Participating and Cooperating Agency Invitation Mailing List

6th Street Viaduct Seismic Improvement Project
Cooperating and Participating Agency Mailing List

Native American Tribal Councils
Mr. Martin Alcala
P.O. Box 9090
Marina Del Rey, CA 90292

California Air Resources Board
Environmental Review Section
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

State Clearinghouse Office of Planning & Research
Director
P.O. Box 3044
Sacramento, CA 95812-3044

California Highway Patrol
Commissioner D.O. Helmik
P.O. Box 942898
Sacramento, CA 95814

California Regional Water Quality Control Board-
Los Angeles Region
Environmental Review Unit
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

State of California Resources Agency
Environmental Review Section
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

California Integrated Waste Management Board
Executive Director
P.O. Box 4025
Sacramento, CA 95812-4025

California Department of Fish and Game
Habitat Conservation Planning
4949 View Ridge Avenue
San Diego, CA 92123

California Transportation Commission
Dianne Eidam, Executive Director
1120 N Street
Room 2221 (MS-52)
Sacramento, CA 95814

California Native American Heritage Commission
Executive Secretary Larry Myers
915 Capitol Mall, Room 364
Sacramento, CA 95814

California State Department of Parks and Recreation
Office of Historic Preservation
Environmental Review Section
P.O. Box 942896
Sacramento, CA 94296-0001

California Department of Parks and Recreation
Attn: Environmental Review
1416 Ninth Street, 9th Floor
Sacramento, CA 95814

Los Angeles County Board of Supervisors
Susan Nissman Policy Deputy
500 W. Temple Street, #821
Los Angeles, CA 90012

County of Los Angeles
Department of Public Works
James Noyes, Director
900 S. Fremont Ave.
Alhambra, CA 91803-1331

6th Street Viaduct Seismic Improvement Project
Cooperating and Participating Agency Mailing List

County of Los Angeles Fire Department
P. Micheal Freeman, Chief
1320 N. Eastern Avenue
Los Angeles CA 90063

Southern California Associations of Government
Environmental Document Review Section
818 West Seventh Street 12th Floor
Los Angeles, CA 90017-3435

South Coast Air Quality Management District
Steve Smith, Program Supervisor, CEQA Section
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

County of Los Angeles Metropolitan Transportation Authority
Chief Planning Officer
1 Gateway Plaza Mail Stop: 99-22-1
Los Angeles, CA 90012-2932

County of Los Angeles
Community Development Commission
Executive Director
2 Coral Circle
Monterey Park, CA 91755

County of Los Angeles
Dept of Regional Planning
Planning Director James Hartl
Rm. 1390, Hall of Records
320 W. Temple St.,
Los Angeles, CA 90012

County of Los Angeles Sheriffs Department
Sheriff Lee Baca
4700 Ramona Blvd.
Monterey Park, CA 91754-2169

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012
Attn: John Miller

County of Los Angeles Department of Regional Planning
Bruce McClendon, Planning Director
Hall of Records (13th Floor)
320 West Temple Street
Los Angeles, CA 90012

City of Los Angeles Dept. of Public Works-Bureau of Street
Services – Eng. Division
1149 South Broadway, Suite 400
Los Angeles, CA 90015
Attn: Mr. Chang Lin

Los Angeles County Dept of Public Works
Water Resources Division
900 South Freemont Avenue, 6th Floor
Alhambra, CA 91803

City of Los Angeles
Planning Department
S. Gail Goldberg, Planning Director
200 North Main Street
Los Angeles, CA 90012

Los Angeles Police Department
William Fierro
2111 East 1st St.
Los Angeles, CA 90033

City of Los Angeles Parks and Recreation
Gale Minniefield
4155 S. Saint Louis ST.
Los Angeles, CA 90033

6th Street Viaduct Seismic Improvement Project
Cooperating and Participating Agency Mailing List

Los Angeles Fire Department
Attn: Captain
1962 E. Cesar Chavez Ave,
Los Angeles, CA 90033

City of Los Angeles
Department of Public Works, Bureau of Engineering
City Engineer
650 S. Spring St., Suite 200
Los Angeles, CA 90014-1911

City of Los Angeles Environment Affairs Department
Asia Palmer
200 N. Spring St.
Los Angeles, CA 90012

Ara J. Kasparian, Manager
City of Los Angeles
Department of Public Works, Bureau of Engineering
Environmental Management Group
650 S. Spring St., Suite 572, Stop 939
Los Angeles, CA 90014-1911

Linda Moore, Environmental Supervisor II
City of Los Angeles
Department of Public Works, Bureau of Engineering
Environmental Management Group
650 S. Spring St., Suite 572, Stop 939
Los Angeles, CA 90014-1911

Mr. Frank Viramontes
City of Los Angeles
Department of Public Works, Bureau of Engineering
Real Estate Division
600 S. Spring Street, 7th Floor, Stop 515

City of Los Angeles
Department of Building & Safety
General Manager
201 N. Figueroa Street
Los Angeles, CA 90012

City of Los Angeles
Community Development Department
Environmental Review Section
215 W. 6th Street
Los Angeles, CA 90014

City of Los Angeles
Cultural Affairs Department
Jay M. Oren, Architect-Historic Preservation Officer
433 S. Spring Street, Suite 1000
Los Angeles, CA, 90013

City of Los Angeles
City Attorney
1800 City Hall East
200 Main Street
Los Angeles, CA 90012

City of Los Angeles
Department of Recreation & Parks
General Manager
200 N. Main Street, Room 1330
Los Angeles, CA, 90012

City of Los Angeles
Housing Authority
Executive Director Donald Smith
2600 Wilshire Boulevard
Los Angeles, CA 90057

City of Los Angeles
Department of Water and Power
Environmental Review Section
111 N. Hope Street
Los Angeles, CA, 90012

City of Los Angeles
Planning Department
200 North Spring Street
Los Angeles, CA 90012-2601

6th Street Viaduct Seismic Improvement Project
Cooperating and Participating Agency Mailing List

City of Los Angeles
Cultural Heritage Commission
Commission Members
433 South Spring Street, 10th Floor
Los Angeles, CA 90013

City of Los Angeles
Hollenbeck Police Station
Captain Paul Pesqueira
2111 E. First St.
Los Angeles, CA 90033

City of Los Angeles
General Services Department
City Hall South, Room 701
Los Angeles, CA 90012

Community Redevelopment Agency
Of the City of Los Angeles
354 South Spring Street, Suite 800
Los Angeles, CA 90013-1258

Los Angeles Unified School District
Office of Environmental Health and Safety
Angello Bellomo, Director
355 South Grand Avenue
Los Angeles, CA 90071

METROLINK
Southern California Regional Rail Authority
700 South Flower Street, 26th Floor
Los Angeles, CA 90017-4101
Attn: David Quirk [or designate]

Deadra Knox
Strategic Development Planner
SCRRA - Metrolink
700 S. Flower Street, 26th Floor
Los Angeles, CA 90017-4101

Naresh Patel
Public Projects
SCRRA - Metrolink
700 S. Flower Street, 26th Floor
Los Angeles, CA 90017-4101

AMTRAK
National Railroad Passenger Corporation
810 North Alameda Street
Los Angeles, CA 90012
Attn: Harry Steelman [or designate]

U.S. Army Corps of Engineers
915 Wilshire Blvd.
Los Angeles, CA 90017

Advisory Council on Historic Preservation
Carol Legard
Federal Highway Liaison
Office of Federal Agency Programs
1100 Pennsylvania Avenue NW
Suite 809 Old Post Office Bldg
Washington DC 20004

U.S. Environmental Protection Agency
District IX
Susan Sturges
Environmental Review Office
Community and Ecosystems Division
75 Hawthorne Street
San Francisco, CA 94105

US Department of Homeland Security Federal Emergency
Management Agency
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

Appendix K
Letter from United States Fish and Wildlife Service



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-LA-08B0291-09SL1013

JUL 22 2009

Carlos Montez
Branch Chief
California Department of Transportation
District 7, Division of Environmental Planning
100 South Main Street, Suite 100
Los Angeles, California 90012-3606

Subject: Request for a List of Proposed, Threatened, and Endangered Species, and Critical Habitats Occurring in the vicinity of the 6th Street Viaduct and Overcrossing Project in Los Angeles County, California

Dear Mr. Montez:

This letter is in response to your request, received June 19, 2009, for a list of federally endangered, threatened, and proposed species and critical habitats occurring in the vicinity of the 6th Street Viaduct and Overcrossing Project in Los Angeles County, California. The project is receiving Federal funding through the Federal Highway Administration (FHWA), and Caltrans has assumed FHWA's responsibilities under the Act for this consultation in accordance with Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) 2005, as described in the National Environmental Policy Act (NEPA) Delegation Pilot Program Memorandum of Understanding between FHWA and Caltrans (effective July 1, 2007) and codified in 23USC327(a)(2)(A).

We commented previously on the project in letter FWS-WRIV-5477.1, in which we declined to become a participating agency as defined under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) due to the heavily urbanized project environment with no natural habitat. We have reviewed the project information provided by your agency and we are unaware of any federally listed species in the vicinity of the proposed project. There is no critical habitat in the vicinity of the proposed project.

Because we do not have site-specific information for the proposed project, we recommend that you seek assistance from a biologist familiar with the habitat conditions and associated species in and around the project site to assess the actual potential for direct, indirect, and cumulative impacts likely to result from the proposed activity. We also suggest that you contact the California Department of Fish and Game regarding State-listed and sensitive species that may



Carlos Montez (FWS-LA-08B0291-09SL1013)

2

occur within the project area. Please note that State-listed species are protected under the provisions of the California Endangered Species Act.

Should you have any questions regarding this letter, please contact Sally Brown of this office at (760) 431-9440, extension 278.

Sincerely,



for Karen A. Goebel
Assistant Field Supervisor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, 100 SOUTH MAIN ST.
LOS ANGELES, CA 90012-3606
TDD (213) 897-6610



*Flex your power!
Be energy efficient!*

August 26, 2011

Ms. Sally Brown
U.S. Fish and Wildlife Service
Ecological Services
Carlsbad Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

RE: Service letter to Caltrans, FWS-LA-08B0291-09SL1013

Dear Ms. Brown:

The California Department of Transportation (Caltrans) has previously corresponded with the U.S. Fish and Wildlife Service (the Service) concerning possible effects stemming from work on a structure over the Los Angeles River. Caltrans has partial federal funding for the 6th Street Viaduct Seismic Improvement Project, and thus must ensure its implementation would not adversely affect federally listed species.

Caltrans has asked for a complete revalidation of the proposed project because of unavoidable delays in project implementation. The proposed project itself has not changed in any way from that originally described. That revalidation would also entail a reply from the Service within the last 180 days. Perhaps the most convenient form of concurrence would be a brief letter in reply stating the Service is still unaware of any federally protected species, or critical habitat, "in the vicinity of the proposed project". If necessary, Caltrans would ask otherwise for a current list of species known to inhabit the generally vicinity of the 6th Street Viaduct.

Thank you for your assistance in this procedural request.

Sincerely yours,


Paul A. Caron
Senior Biologist, Caltrans

Paul D Caron/D07/Caltrans/CAGov
09/20/2011 11:05 AM
To: Mine Struh/D07/Caltrans/CAGov@DOT
cc: Jeff Johnson/D07/Caltrans/CAGov@DOT
bcc:
Subject: Fw: 6th Street Viaduct Seismic Improvement Project

Mine,

Assuming no change in scope related to location, the original Species List, 2009, still remains valid. thanks,

Paul Caron
Senior District Biologist
District 7 (L.A./Ventura Counties)
ph: 213 897-0610
fax: 213 897-0685

----- Forwarded by Paul D Caron/D07/Caltrans/CAGov on 09/20/2011 11:04 AM -----

<Sally_Brown@fws.gov>
09/20/2011 10:57 AM
To: <paul_caron@dot.ca.gov>
cc:
Subject: 6th Street Viaduct Seismic Improvement Project

Paul,
I've received your request for a species list for the 6th Street Viaduct Seismic Improvement Project. The most recent map I have is from March of 2009 and shows the project location along 6th Street between Mateo Street and the 101. If the project location information remains correct, then our July 22, 2009 species list and Sept 14, 2007 SAFETEA-LU response also remain correct (both attached).
(See attached file: 08B0291-09SL1013 6th Street Viaduct.pdf) (See attached file: 5477.1 6th Street Viaduct.pdf)
Thank you,

Sally Brown
U. S. Fish and Wildlife Service
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011
(760) 431-9440 x278
(760) 918-0638 fax



Sally_Brown@fws.gov 08B0291-09SL1013 6th Street Viaduct.pdf 5477.1 6th Street Viaduct.pdf

Appendix L
Notices of Availability of Draft EIR/EIS

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. Main Street
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0362
FAX (213) 897-0685



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June 12, 2009

Individuals interested in the 6th Street Viaduct Seismic Improvement Project

File: 07-LA-101 .20
6th Street Viaduct Seismic Improvement Project
EA 251200

Notice of Public Hearing and Availability of Environmental Impact Report/Statement

The California Department of Transportation (Caltrans) and the City of Los Angeles have completed the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the 6th Street Viaduct Seismic Improvement Project. The proposed project would either retrofit the existing structure or replace it with a new structure.

Your choice of two public hearings will be held to provide you an opportunity to obtain first-hand project information and to express your comments and concerns about the proposed project. The public hearings are scheduled on Tuesday July 14, 2009 at Boyle Heights Senior Citizen Center, 2839 E 3rd St., Los Angeles, CA 90033 at 6 p.m. to 8 p.m., and Tuesday July 21, 2009 at Inner City Arts, 720 Kohler St., Los Angeles, CA 90021 at 5 p.m. to 7 p.m. The meeting will start with an open house for review of project exhibits, followed by a presentation and questions and comments. Caltrans, and the City of Los Angeles staff, will be available to discuss the project and to answer any questions about the proposed project.

If an effort to save paper, the enclosed Draft EIR/EIS is being sent on CD along with an Executive Summary. A hard copy of the document may also be viewed at the following locations:

- Caltrans, District 7, 100 S. Main Street, Los Angeles, CA 90012
- City of Los Angeles Department of Public Works Bureau of Engineering, Bridge Improvement Program, 221 N. Figueroa Street, Suite 350, Los Angeles, CA 90012
- City of Los Angeles Department of Public Works Bureau of Engineering, Environmental Management Group, 1149 South Broadway, Suite 600, Los Angeles, CA 90015
- Benjamin Franklin City Library, 2200 E. 1st Street, Los Angeles, CA 90033
- Little Tokyo Branch City Library, 203 S. Los Angeles Street, Los Angeles, CA 90012
- Council District 14 Information Desk, 200 N. Spring Street, RM 465, Los Angeles, CA 90012

The Draft EIR/EIS may also be viewed on the following websites:

<http://www.dot.ca.gov/dist07/resources/envdocs/>

http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm

We will be pleased to answer any questions you may have with regards to this project. It may be to your advantage to view the project plans at the Public Hearing, to clarify any questions you may have about the proposals. Written comments on the Draft EIR/EIS must be submitted by **August 17, 2009**.

Please send your comments to:

Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning
Department of Transportation, District 7
100 S. Main Street MS-16A
Los Angeles, CA 90012

If you have any questions, please contact Carlos Montez, (213) 897-9116. Thank you for your interest in this important transportation study.

Sincerely,

A handwritten signature in black ink that reads "Ron Kosinski". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

RON KOSINSKI
Deputy District Director, Caltrans District 7

Enclosure

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. Main Street
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0362
FAX (213) 897-0685



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June 12, 2009

Responsible Agencies, Review Agencies,
Cooperating Agencies interested in the 6th Street
Viaduct Seismic Improvement Project

File: 07-LA-101 .20
6th Street Viaduct Seismic
Improvement Project
EA 251200

Notice of Public Hearing and Availability of Environmental Impact Report/Statement

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A Public Hearing for agencies will be held on July 14, 2009 at Caltrans District 7 Building, 100 S Main St, Los Angeles CA 90012, at 2 p.m. to 4 p.m. The meeting will start with an open house for review of project exhibits, followed by a presentation and questions and comments. Caltrans and the City of Los Angeles staff will be available to discuss the project and to answer any questions about the proposed project.

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- City of Los Angeles Department of Public Works Bureau of Engineering, Environmental Management Group, 1149 South Broadway, Suite 600, Los Angeles, CA 90015
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http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm

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Division of Environmental Planning
Department of Transportation, District 7
100 S. Main Street MS-16A
Los Angeles, CA 90012

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Sincerely,

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RON KOSINSKI
Deputy District Director, Caltrans District 7

Enclosure

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. Main Street
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0362
FAX (213) 897-0685



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June 12, 2009

Individuals interested in the 6th Street Viaduct Seismic Improvement Project

File: 07-LA-101 .20
6th Street Viaduct Seismic Improvement Project
EA 251200

Notice of Public Hearing and Availability of Environmental Impact Report/Statement

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- City of Los Angeles Department of Public Works Bureau of Engineering, Environmental Management Group, 1149 South Broadway, Suite 600, Los Angeles, CA 90015
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- Little Tokyo Branch City Library, 203 S. Los Angeles Street, Los Angeles, CA 90012
- Council District 14 Information Desk, 200 N. Spring Street, RM 465, Los Angeles, CA 90012

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<http://www.dot.ca.gov/dist07/resources/envdocs/>

http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm

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Please send your comments to:

Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning
Department of Transportation, District 7
100 S. Main Street MS-16A
Los Angeles, CA 90012

If you have any questions, please contact Carlos Montez, (213) 897-9116. Thank you for your interest in this important transportation study.

Sincerely,

A handwritten signature in black ink that reads "Ron Kosinski". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

RON KOSINSKI
Deputy District Director, Caltrans District 7

Enclosure

Comment Period Ends: 08/24/2009, Contact: Keith Baker 505-346-3820. *EIS No. 20090223, Draft EIS, AFS, NV, Jarbridge Ranger District Rangeland Management Project, Proposed Reauthorizing Grazing on 21 Existing Grazing Allotments, Humboldt Toiyabe National Forest, Elko County, NV, Comment Period Ends: 08/24/2009, Contact: Vern Keller 775-355-5356.*

EIS No. 20090224, Final EIS, AFS, SD, Telegraph Project Area, Proposes to Implement Multiple Resource Management Actions, Northern Hills Ranger District, Black Hills National Forest, Lawrence and Pennington Counties, SD, Wait Period Ends: 08/10/2009, Contact: Chris Stores 605-642-4622

EIS No. 20090225, Draft EIS, AFS, ND, North Billings County Allotment Management Plan Revisions, Proposes to Continue to Permit Livestock Grazing on 43 Allotments, Medora Ranger District, Dakota Prairie Grasslands, Billings County, ND, Comment Period Ends: 08/24/2009, Contact: Jeff Adams 701-227-7800.

EIS No. 20090226, Draft EIS, FHW, CA, 6th Street Viaduct Seismic Improvement Project, Retrofitting or Demolition and Replacement of the Existing Viaduct over the Los Angeles River between Mateo and Mill Streets, Los Angeles County, CA, Comment Period Ends: 08/24/2009, Contact: Eric Worrell 916-498-5890.

EIS No. 20090227, Draft EIS, UAF, AZ, Barry M. Goldwater Ranger East Range Enhancements, Proposes to Take Ten Different Actions would Enhance Range Operations and Training, Yuma, Pima and Maricopa Counties, AZ, Comment Period Ends: 08/24/2009, Contact: Lisa McCarrick 623-856-9475.

EIS No. 20090228, Final EIS, CGD, FL, Port Dolphin LLC Liquefied Natural Gas Deepwater Port License Application, Proposes to Own, Construct and Operate a Deepwater Port, Outer Continental Shelf, Manatee County, FL, Wait Period Ends: 08/10/2009, Contact: Raymond Martin 202-372-1449.

EIS No. 20090229, Draft EIS, NPS, FL, Big Cypress National Preserve Addition, General Management Plan/Wilderness Study/Off-Road Vehicle Management Plan, Implementation, Collier County, FL, Comment Period Ends: 09/08/2009, Contact: Patrick Malone 303-969-2415.

EIS No. 20090230, Draft EIS, AFS, CO, North San Juan Sheep and Goat Allotments, Proposal to Permit Domestic Livestock Grazing Management, Conejos Peak Ranger

District, Rio Grande National Forest, Conejos, Rio Grande and Archuleta Counties, CO, Comment Period Ends: 08/24/2009, Contact: Kelly Garcia 719-274-8971.

EIS No. 20090231, Draft EIS, BIA, CA, Point Molate Mixed-Use Tribal Destination Resort and Casino, Proposed Project is to Strengthen the Tribal Government and Improve the Socioeconomic Status, Gudiville Band of Pomo Indian of the Gudiville Rancheria (Tribe), City of Richmond, Contra Costa County, CA, Comment Period Ends: 09/23/2009, Contact: Larry Blevin 916-978-6037.

EIS No. 20090232, Draft EIS, BIA, CA, Soboba Band of Luiseno Indians Horseshoe Grande Fee-to-Trust Project, Construction of a Hotel and Casino, City of San Jacinto, Riverside County, CA, Comment Period Ends: 09/15/2009, Contact: Pat O'Mallan 916-978-6043.

Dated: July 7, 2009.

Robert W. Hargrove,
Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. E9-16353 Filed 7-9-09; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-8595-3]

Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared pursuant to the Environmental Review Process (ERP), under section 309 of the Clean Air Act and Section 102(2)(c) of the National Environmental Policy Act as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at 202-564-7146.

An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated April 17, 2009 (74 FR 17860).

Draft EISs

EIS No. 20090044, ERP No. D-IBR-J28023-CO, Aspinall Unit Operations—Colorado River Storage Project, Modifying Water Flow Operations, Implementation, Gunnison River, Gunnison, Montrose, Delta, and Mesa Counties, CO.

Summary: EPA expressed concerns because it appears that the proposed operations plan may not include sufficient peak flows to maintain high quality fish habitat. EPA also requested additional information on how the plan

would meet the federal reserved water rights for the Black Canyon of the Gunnison National Park. Rating EC2. *EIS No. 20090115, ERP No. D-SFW-L65571-00, Western Snowy Plover Habitat Conservation Plan, Proposed Issuance of an Incidental Take Permit, Oregon Parks and Recreation Department, Oregon Coast, OR, CA, WA.*

Summary: EPA has no objection to the proposed action. Rating LO.

EIS No. 20090122, ERP No. D-FRC-E03019-00, Phase VIII Expansion Project, Proposed to Construct, Own, Operate, and Maintain New Interstate National Gas Pipeline, Compressor, and Ancillary Facilities in Alabama and Florida.

Summary: EPA expressed concerns regarding potential impacts to noise, aquatic habitats, water resources, and wetlands, and made recommendations for mitigation measures. Rating EC2.

EIS No. 20090127, ERP No. D-FHW-E40826-TN, Interstate 55 Interchange at E.H. Crump Boulevard and South Boulevard Project, To Provide a Balanced Solution for Safety and Capacity Issues at the I55 Interchange, City of Memphis, Shelby County, TN.

Summary: EPA expressed concerns about mobile source air toxics and environmental justice. Rating EC2.

EIS No. 20090132, ERP No. D-NPS-D61063-00, Harpers Ferry National Historical Park, General Management Plan, Implementation, Harpers Ferry, Jefferson County, WV; Loudoun County, VA; and Washington County, MD.

Summary: EPA does not object to the proposed action. However, EPA requested clarifying information on a proposed pedestrian bridge and vegetation removal/manipulation in relation to rewatering the canal and as well as maintaining historic or scenic vistas in specified areas. Rating LO.

Final EISs

EIS No. 20090172, ERP No. F-NOA-K80052-CA, Southwest Fisheries Science Center Replacement, Construction and Operation, located on University of California, La Jolla, CA.

Summary: EPA does not object to the proposed action.

EIS No. 20090148, ERP No. FS-COE-E01013-FL, Rock Mining in the Lake Belt Region Plan, Continuance of Limestone Mining Construction, Section 404 Permit, Miami-Dade County, FL.

Summary: EPA expressed objections to impacts to wetlands from the

Appendix M
Written Comments and Responses on Draft EIR/EIS

Appendix M **Written Comments and Responses on DEIR/EIS**

During the Draft EIR/EIS public review period, 26 emails and letters were received. Responses to all written comments are presented in the order the comment letter was received following this table. Note that Letter No. 26 was received in July 2010 during the Community Advisory Committee meeting No. 10.

Comment Letter No.	Name	Date Received
1	Hill, Farrer & Burrill LLP (representing Spilo Worldwide)	June 29, 2009
2	Federal Emergency Management Agency (FEMA)	July 13, 2009
3	Martha Cisneros	July 14, 2009
4	Juaquin Castellanos	July 14, 2009
5	Victoria Torres	July 14, 2009
6	Kevin Break	July 14, 2009
7	Art Herrera	July 14, 2009
8	Tiffany Sum	July 14, 2009
9	John Fisher	July 14, 2009
10	Cal Hono Freight	July 15, 2009
11	City of Los Angeles Cultural Heritage Commission	July 30, 2009
12	City of Los Angeles Bureau of Street Lighting (BSL)	July 28, 2009
13	Glacier Cold Storage	July 29, 2009
14	County of Los Angeles Department of Public Works	August 6, 2009
15	State of California Public Utilities Commission	August 13, 2009
16	Central City East Association	August 14, 2009
17	Stover Seed Company	August 14, 2009
18	Hill, Farrar & Burrill LLP (representing Spilo Worldwide)	August 14, 2009
19	Hager Pacific Properties	August 17, 2009
20	Friends of the Los Angeles River	August 17, 2009
21	California Archives	August 19, 2009
22	United States Environmental Protection Agency (EPA)	August 24, 2009
23	Department of Interior	September 3, 2009
24	Office of Planning and Research	September 18, 2009
25	Gabrieleno Band of Mission Indians	October 30, 2009
26	CRA/LA	July 29, 2010

Comment Letter #1



One California Plaza
37th Floor
300 South Grand Avenue
Los Angeles, California
90071-3147

June 29, 2009

PHONE: (213) 620-0460
FAX: (213) 624-4840
DIRECT: (213) 621-0815
E-MAIL: kbrogan@hillfarrer.com
WEBSITE: www.hillfarrer.com

By E-mail and U.S. Mail

Carlos Montez 
Senior Environmental Planner
California Department of Transportation
100 S. Main Street
Los Angeles, CA 90012
Carlos.montez@dot.ca.gov

Jim Wu, P.E., Project Manager
City of Los Angeles
Bridge Improvement Program
221 N. Figueroa St., Suite 350
Los Angeles, CA 90012
jim.wu@lacity.org

Wallace E. Stokes III
Bureau of Engineering
Bridge Improvement Project
City of Los Angeles
221 N. Figueroa Street, Suite 350
Los Angeles, CA 90012
wally.stokes@eng.lacity.org

Re: 6th Street Viaduct Seismic Improvement Project
Our client: Spilo Worldwide, 585 and 589 S. Santa Fe Ave.

Gentlemen:

This firm represents Spilo Worldwide which operates its business at 585 S. Santa Fe Avenue, 589 S. Santa Fe Avenue, and 1435 East Sixth Street (the north side frontage road). Spilo owns the property on Santa Fe and leases the Sixth Street parcel. The City of Los Angeles has told Spilo that of the various alternatives under consideration, the City and/or State may take Spilo's property as part of the 6th Street Viaduct Improvement Project. This letter sets forth Spilo's concerns with respect to the impact of the proposed project on its business and Spilo requests that the City and State respond to these issues in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

Spilo is a distributor of beauty products and has operated just northerly of the Sixth Street Viaduct since 1982. Spilo's facilities include its main office at 589 S. Santa Fe Avenue, the 585 S. Santa Fe parcel, where it has additional offices, its receiving area and parking lot with access to Willow Street, and its shipping and loading area at 1435 East Sixth Street, just northerly of the westerly portion of the Sixth Street Viaduct.

We understand that under some of the scenarios being contemplated, the City and/or State would close the East Sixth Street frontage road adjacent to the viaduct. That closure would

1

Carlos Montez
Wallace E. Stokes III
Jim Wu, P.E.
June 29, 2009
Page 2

Comment Letter #1 cont'd

prevent access to Spilo's facility at 1435 East Sixth Street, and prevent Spilo from shipping its products. It is critical to Spilo's operations that its shipping operations have access to city streets so that it can distribute its goods. Without such access, the business could not exist.

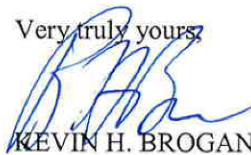
The City's representatives have presented a conceptual mitigation measure which would provide access from the 1435 East Sixth Street parcel to Willow Street. It is critical to Spilo's operations that if the City/State intends to proceed with creating alternative access to those buildings fronting on East Sixth Street, East of Mateo, that such access be secured and completed prior to any impact on access to the northerly frontage road.

During the period the Viaduct is being constructed, Spilo is concerned that the construction noise and vibrations will interfere with its operations, and that large amounts of dirt and debris will find its way onto Spilo's property.

Spilo recognizes the importance of this project, but requests that the City and State fully consider the impacts of the project on local businesses, and completely mitigate those impacts, so that private citizens and businesses are not damaged by this public project.

Please make this letter part of the record of the draft EIR/EIS. Feel free to contact me if you need additional information. Thank you.

Very truly yours,



KEVIN H. BROGAN
OF
HILL, FARRER & BURRILL LLP

cc: Spilo Worldwide

KHB:hjp

HFB 882676.1 S6816002

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2
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Response to Comment Letter No. 1 – Hill, Farrer & Burrill LLP (representing Spilo Worldwide)

1. As indicated in the EIR/EIS (Section 3.4.3.1), the one-way service/frontage road north of the viaduct between Mateo Street and Mesquit Street would be removed and relocated for the Replacement Alternative, which would require acquisition/ relocation of several businesses along this road. Since preliminary discussions between representatives of the City Real Estate Group and Spilo Worldwide, it has been determined that it will not likely be feasible to provide alternative access to the property at 1435 East Sixth Street from Willow Street. The City is committed to working and resolving the right-of-way issue with affected property owners during the right-of-way acquisition process and final design.
2. **Concerns about noise, vibration, and dust during construction.** During the construction period, the contractor would be required to ensure dust control measures are in place. Construction methods would be considered to minimize vibration.
3. **Request the City to consider impacts to local business and mitigate them.** The City will continue to work with the businesses within the project area to try and to resolve any remaining issues.

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052



July 13, 2009

Ronald J. Kosinski *rk CM*
Deputy District Director
Division of Environmental Planning
Department of Transportation, District 7
100 South Main Street, MS-16A
Los Angeles, California 90012

Dear Mr. Kosinski:

This is in response to your request for comments on the Notice of Public Hearing and Availability of Environmental Impact Report/Statement for 07-LA-101.20 6th Street Viaduct Seismic Improvement Project EA 251200.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the City of Los Angeles (Community Number 060137) and County of Los Angeles (Community Number 065043), Maps revised September 6, 2008. Please note that the City and County of Los Angeles are participants in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any **development** must not increase base flood elevation levels. **The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

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www.fema.gov

Ronald J. Kosinski, Deputy District Director
Page 2
July 13, 2009

- All buildings constructed within a coastal high hazard area, (any of the “V” Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA’s Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

1

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community’s floodplain manager for more information on local floodplain management building requirements. The City of Los Angeles floodplain manager can be reached by calling Susan Shu at (213) 485-4493. The Los Angeles County floodplain manager can be reached by calling George De La O, Senior Civil Engineer, Department of Public Works, at (626) 458-7155.

If you have any questions or concerns, please do not hesitate to call Cynthia McKenzie of the Mitigation staff at (510) 627-7190.

Sincerely,



Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:

Susan Shu, Floodplain Administrator, City of Los Angeles
George De La O, Senior Civil Engineer, Los Angeles County Department of Public Works
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources,
Southern District
Cynthia McKenzie, Senior Floodplain Administrator, CFM, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

www.fcma.gov

Response to Comment Letter No. 2 – Federal Emergency Management Agency (FEMA)

1. **The project should comply with the National Flood Insurance Program (NFIP) floodplain management building requirements.** A hydrologic and hydraulic analysis was prepared to analyze potential impacts to the river due to construction of a new bridge. The study concluded that construction of a new bridge will not raise the base flood levels as documented in Section 3.10.3 of the FEIR/EIS. Based on the result of the study, construction of Bridge Concept 1 would adversely affect the river hydraulics upstream of the viaduct due to the larger pier size. Construction of other bridge types (2, 3, 4, 4A, 5) would have either negligible or beneficial impacts to the river hydraulics. Alternative 3 with the principle of Bridge Concept 4 has been identified as the preferred alternative, and it would not affect the river flow.

The 6th Street Viaduct Seismic Improvement Project does not propose to construct any buildings.

Comment Letter #3

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 14, 2009
6:00 pm - 8:00 pm
Boyle Heights Senior Center

Your name MARTHA MSNEROS Affiliation: BH RESIDENT

Business / Residence Address:
1157 SPENCE ST, L.A. 90023
Street City Zip Code

Telephone 323-268-3800 Email MARTHACISNEROS2003@yahoo.com

- Yes, I would like to provide oral public comment
 No, I would like to provide only written comment

Please use this space for your questions and comments

I AM IN FAVOR OF REPLICIA BRIDGE 1A
I OPPOSE ALL OTHER CONCEPTS
w/ +
I commute to DOWNTOWN EVERYDAY ON
6TH ST. BRIDGE.

Thank You for your input!

Response to Comment Letter No. 3 – Martha Cisneros

1. **In support of the Replica.** After comparing and weighing the benefits and impacts of all of the feasible alternatives, as summarized in Summary Table ES-1 and described in detail in Chapter 3, the Project Development Team (PDT) has identified the Replacement Alternative (Alternative 3) with Alignment 3B and the principle of Bridge Concept 4 as the Preferred Alternative for the 6th Street Viaduct Seismic Improvement Project (see Section 2.4 of the FEIR/EIS). The City and Caltrans have made the final determination of the project's impact on the environment based on the comments and concerns expressed during the public review period and the results of the engineering and environmental technical analysis. The Preferred Alternative would attain the purpose of the project.

The City will go through a process to refine the final design for the bridge replacement to ensure that both an architecturally distinctive and cost-effective design is selected for construction. Design details of the preferred cable-supported bridge type (the principle of Bridge Concept 4) could evolve into different engineering and architectural expressions of this concept, in terms of tower and cable connection form for example, in addition to aesthetic elements of colors, textures, lighting, railings, and gateway elements.

Note that during construction, 6th Street Viaduct will be closed and detours will be in place.

Comment Letter #4

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 14, 2009
6:00 pm – 8:00 pm
Boyle Heights Senior Center

Your name Joaquin Castellanos Affiliation: _____

Business / Residence Address:
528 N. Comings St - LA - CA 90033
Street City Zip Code

Telephone (310) 309-8175 Email castellanosjoaquin@yahoo.com

- Yes, I would like to provide oral public comment
- No, I would like to provide only written comment

Please use this space for your questions and comments

I like the replica of the 6th St Bridge because it will keep the sense of this community. This community has history and these bridge is part of it. I like also the color is on right now. also the lighting is important because it will bring safety to it we need to bring antique lights. to made it more beautiful and more peaceful place to do a nice walk.

Sincerely

Joaquin Castellanos.

also this Bridge should be call the same name. we don't want to dedicate or rename it to anyone.

Thank You for your input!

6th St. Bridge Viaduct

~~on the back~~

Response to Comment Letter No. 4 – Juaquin Castellanos

1. **In support of the Replica.** The preferred alternative is the principle of Bridge Concept 4 and Alignment 3B (see Response to Comments 4-1 above)].
2. **The same name should be used for the new bridge.** Currently there is no consideration of changing the name of the 6th Street Viaduct.

Comment Letter #5

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 14, 2009
6:00 pm - 8:00 pm
Boyle Heights Senior Center

Your name Victoria Torres Affiliation: Boyle Heights Historical Society
Business / Residence Address:
116 1/2 Mirasol Street Los Angeles 90023
Street City Zip Code
Telephone 323/269-2668 Email _____

- Yes, I would like to provide oral public comment
 No, I would like to provide only written comment

Please use this space for your questions and comments

In the last two years I like that you have taken our concerns into consideration on keeping the 6th Street Bridge as close to you can to blend in with the other historical bridges. I like the concept of LA Bridge. It has that historical look and does keep in concept with the bridge as it looks today with the pillars under the bridge with the arches.

Thank You for your input!

Response to Comment Letter No. 5 – Victoria Torres

1. **In support of Concept 1A.** The preferred alternative is Bridge Concept 4A and Alignment 3B (see Response to Comments 4-1 above)].

Comment Letter #6

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 14, 2009
6:00 pm - 8:00 pm
Boyle Heights Senior Center

Your name Kevin Break Affiliation: photographer 1st St Project

Business / Residence Address:
600 MOULTON 0205 LA CA 90031
Street City Zip Code

Telephone 323 221 5129 Email 1cBreak@gmail.com

- Yes, I would like to provide oral public comment
- No, I would like to provide only written comment

Please use this space for your questions and comments

It sounds mundane, however it would be a great idea to make the new bridge "pigeon-proof" as there is a recurring infestation right at the arches. 1

Secondly, there is so much filming at the bridge, why not put outlets for 120/220/480 VAC so that film crews could forego the stinking diesel generators? 2

Thank You for your input!

Response to Comment Letter No. 6 – Kevin Break

1. **Suggested “pigeon-proof” be considered in the new bridge design.** The suggested feature will be considered during the final design phase.
2. **Suggested electrical outlets be furnished on the bridge to facilitate filming activities.** The suggested feature will be considered during the final design phase.

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 14, 2009
6:00 pm - 8:00 pm
Boyle Heights Senior Center

Your name ART HERRERA Affiliation: BOYLE HTS. RESIDENT HOMEOWNER

Business / Residence Address:

3438 LEB ST LA 90023
Street City Zip Code

Telephone (323) 2684345 Email o

- Yes, I would like to provide oral public comment
- No, I would like to provide only written comment

Please use this space for your questions and comments

I support THE MODEL TYPE BRIDGE "4" A "1" } 1

Thank You for your input!

Response to Comment Letter No. 7 – Art Herrera

1. **In support of Concept 4A.** The preferred alternative is the principle of Bridge Concept 4 and Alignment 3B (see Response to Comments 4-1 above)].

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing
Tuesday, July 21, 2009
5:00 pm - 7:00 pm
Inner City Arts

Your name TIFFANY SUM Affiliation: Cal State University Long Beach

Business / Residence Address:

1308 Factory Place #515 Los Angeles CA 90013
Street City Zip Code

Telephone 415 623 4113 Email tsum@csulb.edu

- Yes, I would like to provide oral public comment
- No, I would like to provide only written comment

Please use this space for your questions and comments

I'd vote for proposal 7A.

The modern ~~de~~ and modest design that can
compare with London's Millennium Bridge to London Bridge
and other older infrastructure.

1

There needs to align cultural communities and events to expand the
use of the bridge : Greenes, more human activities involved.

2

Thank you for your input!

Response to Comment Letter No. 8 – Tiffany Sum

1. **In support of Concept 4A.** The preferred alternative is the principle of Bridge Concept 4 and Alignment 3B (see Response to Comments 4-1 above).
2. **Support more cultural activities on bridge.** Once the bridge is replaced, it could be available for events.

7-14-09

Comment Letter #9

City of Los Angeles Department of Public Works Bureau of Engineering and Caltrans
6th St Bridge Viaduct Seismic Improvement Project Comment Form

Public Hearing

Responsible Agencies, Review Agencies, Cooperating Agencies

Tuesday, July 14, 2009

2:00 pm - 4:00 pm

Caltrans

Your name John Fisher Affiliation: LADOT - ASST. GM

Business / Residence Address:

_____	Street	_____	City	_____	Zip Code
_____	Telephone	_____	Email	_____	_____

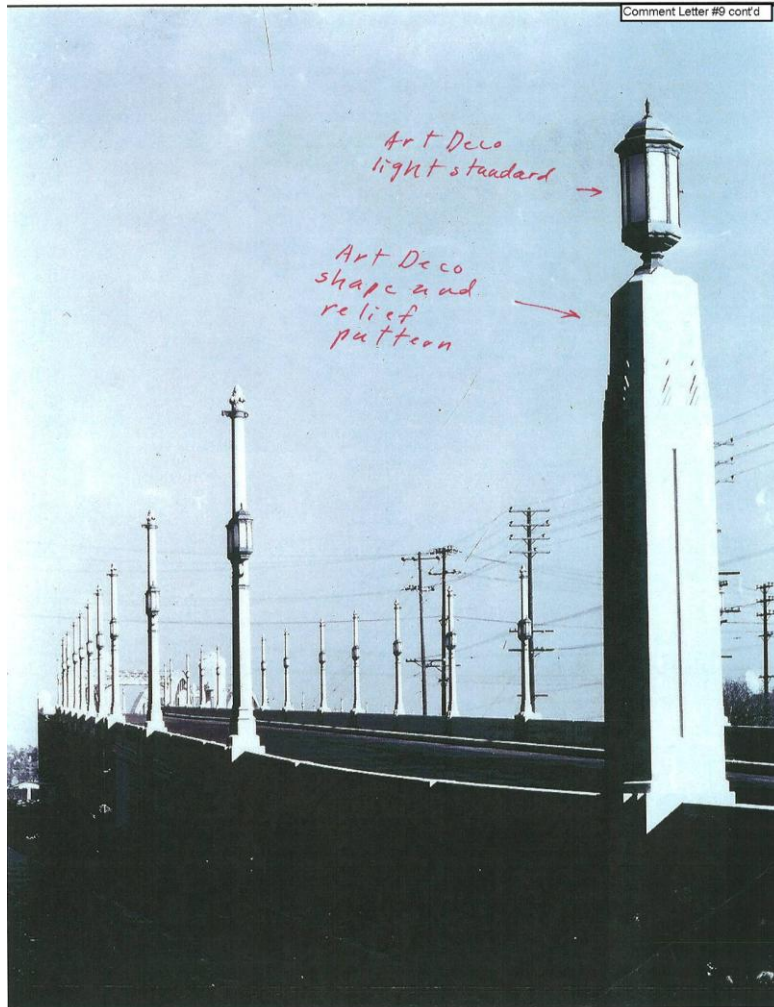
- Yes, I would like to provide oral public comment
- No, I would like to provide only written comment

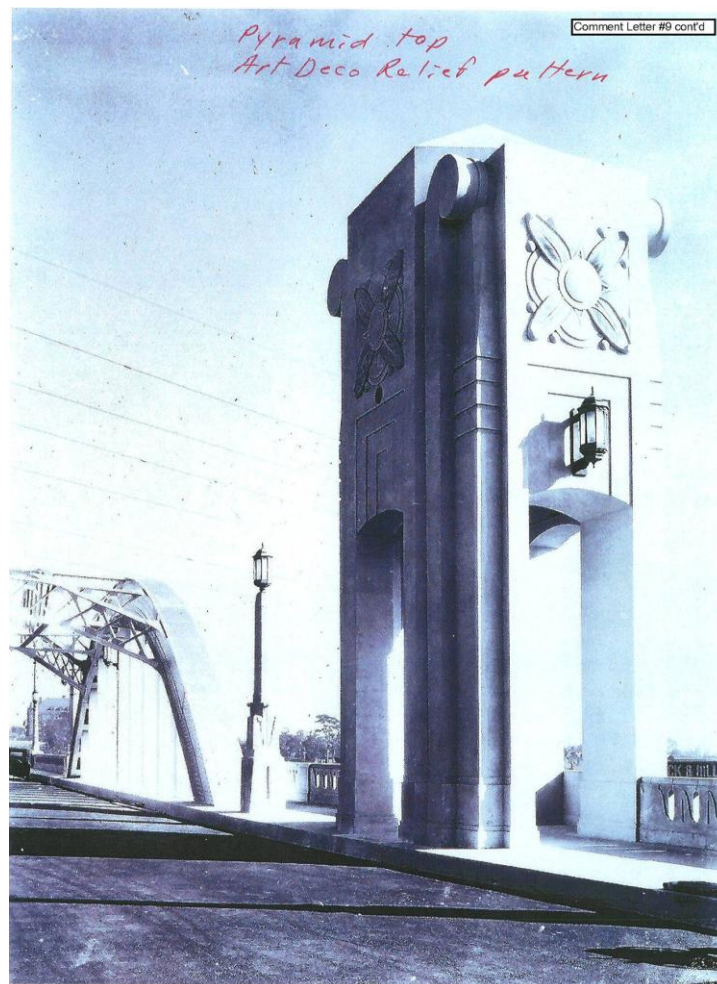
Please use this space for your questions and comments

I would like to incorporate some of the original design elements from the existing bridge, such as the Pyramid shape on the Pylon, art deco light standard and flower design - see pictures attached.

1

Appendix M Written Comments and Responses on DEIR/EIS





Response to Comment Letter No. 9 – John Fisher

1. **Some original design elements should be incorporated into new bridge design.** The preliminary bridge concepts incorporate the architectural vocabulary derived from the massing of the existing river bridges. During the final design phase, an aesthetic advisory committee will be formed and will provide input on architectural features to be included in the design.



"Wally Stokes"
<Wally.Stokes@lacity.org>
07/15/2009 01:23 PM

To <david_lewis@dot.ca.gov>, "Yoga Chandran"
<Yoga.Chandran@lacity.org>, <SPatel@moffattnichol.com>,
<WQuesada@moffattnichol.com>,

cc

bcc

Subject FW: Comments

First of the e-mail comments.

wally

From: Wally Stokes
Sent: Wednesday, July 15, 2009 1:19 PM
To: "Jim Zant"
Cc: glaciervp; Diane Carletello; Sergio Ibarra
Subject: RE: Comments

Thank you Mr. Zant, your comment has been passed to the project team for further analysis. A member of the team may contact you in the future to gather additional site-specific information. Please be assured that your concern will receive the team's full attention.

wally

From: "Jim Zant" [mailto:Jim@calhono.com]
Sent: Wednesday, July 15, 2009 11:34 AM
To: <wally.stokes@lacity.org>
Cc: <glaciervp@aol.com>, "Diane Carletello" <Diane@calhono.com>, "Sergio Ibarra" <Sergio@calhono.com>
Subject: Comments

Mr. Stokes:

I attended the meeting last night & made a public comment about our particular concern but I also wanted to put it in writing. We sublease part of a building from Glacier Cold Storage – our portion of the building is located at 634 S. Mission Rd. We ship ocean containers to Hawaii & Guam so we unload a lot of truck & containers every day. Since our fence that marks the end of our truck / container maneuvering area abuts the bridge pillars, we would like to get an answer as to whether we will lose any of this area when this segment of the old bridge is demolished. We would like to know exactly how we will be affected & for how long. For instance, during the demolition of the bridge sections that abut this property, will the crane be stationed to the north or south of the bridge & how long will it take to complete the demolition of this span(s) ?

1

If we will lose any of our truck maneuvering space, we will need to relocate our facility to another building with sufficient space in front of a dock to maneuver trucks. This would be quite a hardship for us as we would need to find a building with sufficient dock space AND with freezer space.

After the meeting last night, Mr. Viramontes approached me & offered to meet with us at our facility. I have emailed him this morning & asked him to meet with us during the week of August 3rd.

Regards,

Jim Zart

Cal Hono Freight

Phone: 323-318-9468

Hawaii Only: 800-500-0225 ext. 103

Fax: 323-981-6851 or 323-315-7144



Response to Comment Letter No. 10 – Cal Hono Freight

1. **Impacts on business operations from project construction.** Special provisions to protect properties located adjacent to the bridge will be included in the project specifications. Prior to demolition, the contractor will be required to submit the means and methods for demolition for City review and approval. During the demolition period, construction inspectors will ensure that the contractors adhere to the approved plan.

As described in the EIR/EIS, demolition and construction of Alternative 2 would take approximately 2.5 years and Alternative 3 would require approximately 4 years. The actual construction schedule cannot be accurately predicted until the final design phase is completed.

DEPARTMENT OF
CITY PLANNING
OFFICE OF HISTORIC RESOURCES
200 N. SPRING STREET, ROOM 620
LOS ANGELES, CA 90012-4801
(213) 978-1200

CULTURAL HERITAGE COMMISSION

RICHARD BARRON
PRESIDENT
ROELLA H. LOUIE
VICE-PRESIDENT

GLEN C. DAKE
MIA M. LEHRER
OZ SCOTT

FEELY C. PINCOLI
COMMISSION EXECUTIVE ASSISTANT
(213) 978-1294

CITY OF LOS ANGELES
CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

Comment Letter #11

EXECUTIVE OFFICES

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JOHN M. DUGAN, AICP
DEPUTY DIRECTOR
(213) 978-1274

EVA YUAN-MCDANIEL
DEPUTY DIRECTOR
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FAX: (213) 978-1275

INFORMATION
(213) 978-1270

www.planning.lacity.org

Wallace E. Stokes III
Environmental Coordinator
City of Los Angeles
221 N. Figueroa Street, Suite 350
Los Angeles, CA 90012

July 30, 2009

Dear Mr. Stokes:

On behalf of the Cultural Heritage Commission and the Office of Historic Resources, thank you for the opportunity to formally comment on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the 6th Street Viaduct Seismic Improvement Project. As you know, the 6th Street Viaduct has been determined eligible for the National Register of Historic Places and is designated as Historic-Cultural Monument (HCM) #910 under the City's Cultural Heritage Ordinance.

One of the Cultural Heritage Commission's primary responsibilities in its capacity as a Mayor-appointed decision-making body is overseeing the preservation and safeguarding of the City of Los Angeles' nearly 1000 Historic-Cultural Monuments (HCMs). Since the designation of the Sixth Street Bridge as an HCM, the Cultural Heritage Commission has expressed concern over the potential demolition of this iconic landmark as part of its seismic improvement project. Cultural Heritage Commissioners have worked closely with the Bureau of Engineering, particularly in studying options to address the bridge's Alkali-Silica Reaction (ASR) condition.

Based on an agreement signed on January 29, 2008, the Department of City Planning and Bureau of Engineering formalized a review process that allowed the Cultural Heritage Commission to provide input at appropriate milestones in the CEQA and Section 106 processes. After careful review of the DEIR, the Cultural Heritage Commission submits the following substantive comments:

Cultural Heritage Commission Comments

1) The DEIR neglects to cite the 6th Street Bridge's designation as Historic-Cultural Monument #905 in the Executive Summary. The Introduction and Background section of the DEIR omit any reference to the subject bridge's Historic-Cultural Monument designation or its inclusion in the California Register of Historical Resources and eligibility for placement in the National Register of Historic Places.



AN EQUAL EMPLOYMENT OPPORTUNITY – AFFIRMATIVE ACTION EMPLOYER



2) The DEIR should evaluate which alternatives would allow for the 6th Street Bridge to retain Historic-Cultural Monument (HCM) status. As part of its CEQA evaluation, the DEIR does not evaluate the alternatives to address the local designation of the subject bridge as a Historic-Cultural Monument. Demolition of the 6th Street Bridge under a replacement alternative would result in a loss of its HCM designation. A full replication/reconstruction alternative and/or sufficient retention of existing character-defining features may allow for the proposed project to retain its HCM designation.

2

3) The DEIR does not provide a full replication/reconstruction alternative. Of the bridge concepts for the replacement alternative presented in Chapter 2 of the DEIR, "Bridge Concept 1-Main Span Replication" offers only a partial replication of the existing bridge. The reconstruction component would be limited to the span of the new bridge that crosses the Los Angeles River. It must be noted that many historic character-defining design elements within this section in the "Main Span Replication" will in fact not be replicated:

- a) the bridge railing will be a new design with an 8-foot stainless steel wire projectile barrier.
- b) the two main center pylons will be a new "Deco" design not based on the original landmark 1932 pylons.
- c) original light fixtures will not be reproduced.
- d) the two iconic double-arched steel will not be entirely replicated, utilizing a different number of steel columns and not reproducing the steel latticework located between each paired archway.

3

The discussion of this alternative in the Bridge Type Selection-Advance Planning Study Phase describes this alternative as "taking cues from the original bridge [that] pays homage to the original landmark bridge design" and "capturing the essence of the old landmark bridge." As described, the replacement bridge's span replication is not in fact a replication, but rather a new design taking some architectural and design cues from the historic 6th Street Bridge and reinterpreting them.

Lacking in the DEIR is a full replication/reconstruction alternative that would attempt to the greatest extent possible, using original architectural plans and archival material, to reconstruct the existing subject bridge. For this type of alternative, the Secretary of the Interior's Standards for Reconstruction would apply in developing a proposed project that would comply with preservation guidelines. As a case study, the City of Pasadena successfully reconstructed the 1913 Colorado Street Bridge in the early 1990s to successfully correct structural and safety deficiencies.

4) The DEIR relies upon artificial constraints on the proposed bridge's width, which have significantly driven the analysis of project alternatives. A wider bridge could result in significant impacts on communities on both sides. While it is well known that additional street capacity quickly fills up when it becomes available, in this case the wider footprint of the new bridge will immediately become constricted into narrower arterial streets on either side of the proposed project. Furthermore, Federal standards regarding bridge width appear to be artificially constraining alternatives and limiting preservation options. The Final EIR should explore successful approaches nationally to preserving historic bridges, including possible opportunities to work with Federal officials to maintain existing widths for historic bridges.

4

The Final EIR should also consider the extent to which the bridge's overall footprint itself may be considered a character-defining feature of the existing Monument. Additionally, the Final EIR should evaluate the cost-savings of maintaining the scope of the project within the footprint of the current bridge, thereby eliminating the need to acquire private property as necessitated by a bridge widening.

5) The DEIR should include study of an additional partial preservation alternative. The replacement alternative in the DEIR preserves none (0%) of the existing historic bridge; the retrofit alternative retains 95% of the viaduct. Somewhere in between 0% and 95% may be a project alternative that retains the eligibility of the bridge as a Historic-Cultural Monument and/or as a contributor to the National Register-eligible district of bridges while addressing the ASR-related issues.

5

The DEIR does acknowledge that the bridge contributes to a CRHR-eligible district, thereby finding that Alternative 2 would have a less than significant impact to the district. The partial preservation alternative selected should retain the bridge as a contributor to this ensemble of historic bridges.

6) The potential mitigation measures under Alternative 3-Replacement in Chapter 3.9 (Cultural Resources) are inadequate. [3-148-149] The mitigation measures listed for a possible replacement project are inappropriate:

- a) The first mitigation measure states that "the City would install two Cultural Heritage Commission plaques" at each end of the new replacement bridge. Since the new replacement bridge would most likely have lost its Historic-Cultural Monument designation, it would be inappropriate to use the Cultural Heritage Commission's Plaque Program for an HCM that would no longer be extant.
- b) There is no stated mitigation measure that involves physical retention of some character defining features of the existing historic bridge. Under the replacement alternative, a new replacement bridge could potentially incorporate architectural elements of the existing bridge. Another possibility is to relocate architectural elements to a new location in a public setting.

6

Mitigation measures that include an educational component should target schools located in Boyle Heights and the Downtown area.

7) The proposed location for the retention and reuse of the historic bridge's original steel arches in the replacement alternatives may be inappropriate. All replacement alternatives in the DEIR propose recycling the iconic original steel arches and relocating them to the two entrances at the abutments. The Bridge Type Selection-Advance Planning Study Phases states:

7

In respect to the historical landmarking of the existing bridge, the original steel arches that will be removed from their central location will be re-used as gateway monuments at the abutments. This will honor the original landmark by keeping it on site. This monumental gateway entry, at both ends of the viaduct, marks a beginning and an end point for the traveler along this long span, also acting as an homage to this popular historical structure. [Page 30]

Although the effort to conserve the original steel arches on site is applauded, their new location is not ideal and presents some contextual design issues.

8) The DEIR is silent on the effects of the proposed alternatives on architectural elements of the subject bridge that are not structurally linked to the 6th Street Bridge. During the HCM designation of the 6th Street Bridge, the staff of the Office of Historic Resources (OHR) identified two architectural elements that are not structurally linked to the actual bridge but are nonetheless important character-defining features of the bridge that were constructed alongside the bridge itself:

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- a) On the southwest corner of Boyle Avenue and Whittier Boulevard in the Boyle Heights side of the 6th Street Bridge is a decorative pylon and semi-circular railing matching the

design and material of the 6th Street Bridge. A matching decorative feature appears to have once existed on the opposite side of the street. Located several hundred feet from the actual structure of the 6th Street Bridge, this architectural element appears to be an original 1932 feature and has served as a gateway feature to the subject bridge for the Boyle Heights community.

b) Directly beneath the 6th Street Bridge as it crosses Santa Fe Avenue on the western section of the bridge is a separate substructure consisting of a tunnel entrance leading to the Los Angeles River. The tunnel entrance as it descends below grade is surrounded by a decorative Art Deco-style railing, surrounding the opening on three sides. Low-height pylons with geometric and floral designs support pairs of octagonal light fixtures matching those on the subject bridge's deck.

The DEIR does not identify these two features and therefore does not explain whether these features would be demolished or retained in the alternatives. OHR staff has identified these as historic character-defining features of the 6th Street Bridge.

9) The DEIR fails to cite the Guidelines for Historic Bridge Rehabilitation and Replacement by the American Association of State Highway and Transportation Officials (AASHTO). Conducted as part of the National Cooperative Highway Research Program (NCHRP) and requested by the American Association of State Highway and Transportation Officials (AASHTO) in 2007, the report sought to establish guidance for balanced and consistent decision making in "rehabilitation versus replacement" bridge projects. As a pertinent project dealing with these same issues, the report should be addressed as part of the DEIR.

10) Mitigation measures MM-4 and MM-15 in Section 4.9 of CEQA Evaluation appear to imply that an MOA has already been executed between SHPO, City of LA, and Caltrans. [4-31, 4-33] Proposed mitigation measures MM-4 and MM-15 state, "Implement all stipulations of the executed Memorandum of Agreement (MOA) between the State Historic Preservation Officer (SHPO), City of Los Angeles, and Caltrans." The public and interested parties have not had the opportunity to review the DEIR and analysis the range of alternatives. It would therefore be inappropriate to bypass this discussion and skip directly to the selection of final mitigation measures that assume adoption of the preferred alternative identified in the FOE and DEIR. The Cultural Heritage Commission has not yet reviewed this MOA language. If the MOA is not yet executed, its inclusion in the DEIR would constitute deferred mitigation, which is impermissible under CEQA.

11) SHPO's role in concurrence with a finding of eligibility and with the HPSR is very unclear. [3-137] If the subject bridge was formally determined eligible for the National Register, then SHPO concurrence should have occurred. It is also unclear why and whether there was no response from SHPO, since the State Historic Preservation Officer has participated in meetings on this proposal.

12) Chapter 2 of the DEIR acknowledges the vote taken by the Community Advisory Committee (CAC) in selecting the "Through Arches Category" replacement bridge type, but does not clarify that this is support for a full replication alternative. [2-49] The Public Input section of the Proposed Project Alternatives mentions the CAC's majority vote for the "Through Arches Category" replacement bridge type (1-R). The summary text does not acknowledge that this is support for the existing historic bridge design. In the illustrated section for the alternative, Figure 2-17 states "This is the existing bridge" in describing the 1R alternative. This CAC supported alternative is also titled "Alternative 1R-Replication" in Figure 2-18.

13) The DEIR's account of the Community Advisory Committee (CAC) actions and comments do not reflect the meeting minutes and the discussion by community members. [5-3] The summary of the CAC's activities are vague and misleading:

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Comment Letter #11 cont'd

- a) The DEIR neglects to mention the CAC's vote on bridge alternatives that took place on August 28, 2007 (CAC Meeting #4). As stated in Comment 9, this vote for the replication/reconstruction alternative received the overwhelming majority of votes.
- b) CAC Meeting #7 states "most CAC members present at the meeting were in support of the replacement alternative with the modern bridge type." The meeting minutes do not indicate this assertion.
- c) The description of discussions that took place on February 12, 2009 (CAC Meeting #8) is misleading, stating "a few CAC members were vocal about the bridge type (cable-supported concept) recommended by PDT." This exchange was in fact opposition to the cable-supported alternative and concern that their vote in support for the replication/reconstruction alternative was disregarded.

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14) The DEIR's Cooperating and Participating Agency Mailing List has incorrect contact information for the Office of Historic Resource, Department of City Planning. [Appendix J] The DEIR mailing lists Mr. Jay M. Oren, Historic Preservation Officer, with the Cultural Affairs Department. Mr. Oren has been retired from this position since 2006. The list also provides a mailing address at the Cultural Affairs Department for the Cultural Heritage Commission. The CHC has been under the auspices of the Department of City Planning since 2004. The mailing addresses should be corrected to ensure proper notification procedures.

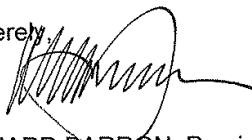
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As one of the most iconic and recognized bridges in Los Angeles, the 6th Street Bridge demands utmost care and dedication in developing a seismic improvement project that will ensure its continued legacy as a beloved landmark. The Cultural Heritage Commission trusts that these comments will be pertinent in addressing the concerns and issues regarding the potential loss of the 6th Street Bridge and in developing EIR alternatives that should allow for the maximum retention of the existing bridge and/or a Standards-compliant reconstruction option.

To ensure the Cultural Heritage Commission's continued input on this project, I formally request a future presentation at a scheduled public hearing upon the release of the Final Environmental Impact Report (FEIR). Your continued dialogue with the Office of Historic Resources and our Commission is greatly appreciated.

Thank you for this opportunity.

Sincerely,



RICHARD BARRON, President
Cultural Heritage Commission

Response to Comment Letter No. 11 – Cultural Heritage Commission

Commission

0. **Correction is made to CHC letter first paragraph, last sentence:** The 6th Street Viaduct is designated as Historic-Cultural Monument (HCM) # 905.
1. **The Draft EIR neglects to cite the 6th Street Bridge’s designation as Historic-Cultural Monument #905 in the Executive Summary.** The Draft EIR/EIS (June 2009) included statements that the viaduct was designated as a City of Los Angeles Historic-Cultural Monument in January 2008 (see Section 3.9.2.5, Historic Architectural Resource Findings and Section 3.2., Section 4(f) Evaluation [Appendix B]). A statement is added to the introduction of the summary of the Final EIR/EIS indicating that the viaduct is eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), and that it is designated as Historic-Cultural Monument (HCM) #905.
2. **The DEIR should evaluate which alternatives would allow for the 6th Street Bridge to retain HCM status.** Several retrofit schemes were studied and evaluated in the DEIR/EIS; most of them could allow for retention of City of Los Angeles HCM status, depending on a determination by the Cultural Heritage Commission (CHC) and the city council. Most of them would maintain the integrity of the historic property (the 6th Street Viaduct) to convey its significance (based on maintaining its current location [alignment], use of the same materials [concrete], workmanship of concrete finishes) and minimize effects on the feeling and association below the deck level of the viaduct (use of infill walls between selected columns). Several historic bridges, including the 6th Street Viaduct, were seismically retrofitted in the past and were subsequently designated as City of Los Angeles HCM bridges. Section 4.4.1 (Cultural Resources) of the FEIR/EIS documented that the HCM status of the 6th Street Viaduct would likely be maintained under the retrofit alternative.

One of those schemes evaluated in the EIR/EIS included the full reconstruction/ replication of the viaduct by replacing the ASR-damaged concrete within the existing viaduct while maintaining structural steel arch-spans, alignment, and width (see Section 2.4.1.8, page 2-39 of the Draft EIR/EIS). It was determined that there was no practical way to replace the bad concrete with new material without replacing all of the concrete. Implementation of this scheme would essentially require replacement of the entire viaduct. This alternative was withdrawn from further evaluation in the EIR/EIS because it does not meet the purpose of the project, nor would it remove the viaduct from the EBL list due to functionally deficient geometrics that would remain (see FEIR/EIS Section 2.5).

Another retrofit alternative, the Infill Walls/Heavy Steel Casing scheme, evaluated in the Draft EIR/EIS would retrofit the viaduct’s columns by encasing them with steel, and reinforced concrete infill walls would be constructed between selected columns. A 6-inch layer of architectural mortar would conceal exposed plates, channels and bars to maintain the visual look of concrete and texture. Exterior columns would be encased using steel plates, high strength pre-stressing bars and surface architectural mortar to hide the steel plates and maintain the concrete finish. Encasing all exterior columns with concrete mortar would also maintain visual balance and consistency for the retrofitted structure. In

addition, new foundations, grade beams, retrofitting of bent caps, and closure of some expansion joints in the superstructure would be constructed in combination with the column retrofits. The structure would be retrofitted to the minimal standard of “no collapse” for the design seismic event (maximum credible earthquake). This alternative would have a lower initial construction cost and may be desirable from a historic preservation point of view. However, retrofit is not preferred because it does not repair the existing condition or stop the ASR deterioration; it has high life-cycle cost; it does not correct the geometric design deficiencies of the existing viaduct; it would require reduction of the railroad horizontal clearances; and it would only meet a “no collapse” standard and significant damage could occur in a major earthquake, resulting in the need for viaduct replacement (see FEIR/EIS Section 2.5).

In addition to the retrofit alternative described above, a Substructure Replacement Alternative was developed to resolve the ASR deterioration within the substructure and to strengthen the lateral support system (seismic). If implemented, this retrofit scheme could allow for retention of City of Los Angeles HCM status, depending on a determination by the CHC. This alternative would replace all substructure (below deck) elements, including piles, footings, grade beams, columns and bent caps, to accommodate the anticipated seismic demands. The design would include substructure replacement for the length of the entire structure. In addition, this retrofit scheme would replace the existing substandard concrete barrier; the new barrier would be similar to the aesthetics of the existing barrier. By replacing the substructure elements rather than using traditional strengthening retrofit solutions, as in the Infill Wall/Heavy Steel Casing Alternative, the viaduct’s aesthetics and historic nature could be retained by utilizing architectural features that are compatible with the existing members. This alternative was withdrawn from full environmental evaluation due to major constructability problems, much higher cost (see FEIR/EIS Section 2.5), and significant superstructure damage could occur in a major earthquake, resulting in the need for viaduct replacement.

In addition to the retrofit schemes mentioned above, Bridge Concept 1A – Replication from Abutment to Abutment with a wider structure was evaluated during the preparation of the FEIR/EIS, in response to Community Advisory Committee (CAC) requests. (Replication was used here to mean that the structure would have a similar architectural look, but would meet current design standards, such as width, alignment, safety barriers and structural detailing.) Bridge Concept 1A would be identical to Concept 1 (Main Span Replication) between the riverbanks. The design would be similar to the original design with complimentary dual arches and main center pylon with belvederes providing pedestrian viewing areas as in the original 1932 design. Unlike Concept 1, which employs long span box girders with fewer columns east and west of the river similar to the other replacement concepts, refinement Concept 1A would repeat the short span haunched girders with numerous support columns of the original structure from the riverbanks to the ends of the viaduct. While this alternative would maintain the integrity of the property to convey its significance, based on use of the same materials (concrete and structural steel arch spans), workmanship of concrete finishes, architectural style, and feeling associated above and below the deck level, the viaduct alignment and width would be designed to current standards. This alternative may allow for retention of City of Los Angeles HCM status, depending on a determination by the CHC regarding the alignment shift and wider deck. Due to construction constraints and relatively high cost associated with the

construction of this bridge concept, it was not advanced for detailed impact analysis in the Final EIR/EIS.

3. The DEIR does not provide a full replication/reconstruction alternative.

3.1 As discussed in Response No. 2 above, several retrofit schemes were studied and evaluated in the Draft EIR/EIS, one of those schemes included the preserving the general appearance of the viaduct by replacing the ASR-damaged concrete within the existing viaduct while maintaining structural steel arch-spans, alignment, and width (see Section 2.4.1.8, page 2-39 of the Draft EIR/EIS). In addition, Bridge Concept 1A – Replication from Abutment to Abutment was developed, as discussed in Response No. 2 above. Bridge Concept 1A would be similar to the original architecture with complimentary dual arches and main center pylon with belvederes providing pedestrian viewing areas as in the original 1932 design. Concept 1A would replicate the short span haunched girders with numerous support columns of the original structure from the riverbanks to the ends of the viaduct, columns having the architectural style of the existing viaduct. Concept 1A would maintain the integrity of the property to convey its significance from abutment to abutment (based on use of the same materials (concrete and structural steel arch spans), workmanship of concrete finishes, architectural style) and minimize affects on the feeling and association below the deck level, the viaduct alignment and width would be designed to current safety standards. However, the deck width and resulting association between the arch ribs and overhead latticework bracing (feeling/association), and alignment (location) would be designed to current standards; thereby not fully replicating the existing viaduct historic character-defining elements.

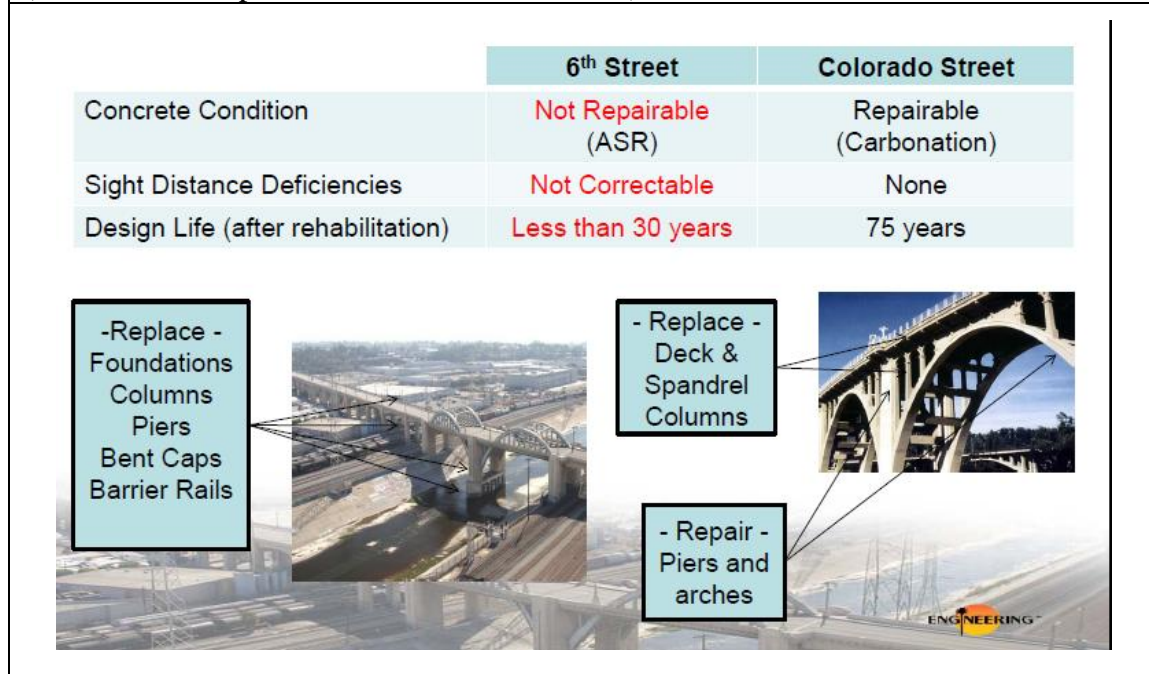
3.2 The materials, seismic, and functional deficiencies of the 6th Street Viaduct are different from the Colorado Street Bridge, each with unique issues and solutions. The paragraphs that follow describe why 6th Street Viaduct cannot be reconstructed the same way as the Colorado Street Bridge.

Figure 1 compares 6th Street Replacement to the Colorado Street Bridge Rehabilitation Project in Pasadena. Retrofit alternatives Infill Walls/Heavy Steel Casing and Substructure Replacement are rehabilitation strategies similar to that used at the Colorado Street Bridge. While there are similar issues, there are major differences.

- 1) The structural strength at Colorado Street Bridge could be restored where as the concrete at 6th Street Viaduct has the ongoing chemical reaction ASR, and is not repairable. At Colorado Street Bridge, the concrete had high levels of carbonation that caused reinforcing steel corrosion and sequential concrete cracking. However, the damage could be repaired by removing concrete around the reinforcing steel with high level of carbonation and replacing the steel with epoxy coated steel. In the case of 6th Street Viaduct, the steel is not attacked, rather the concrete itself deteriorates.
- 2) The geometric and alignment deficiencies cannot be remedied at 6th Street Viaduct due to the roadway width (no shoulders or median), alignment (kink), and existing arches (sight distance). The Colorado Street Bridge does not have these deficiencies.
- 3) The design life that would result by rehabilitation of 6th Street Viaduct using substructure replacement is less than 30 years, due to continuation of ASR

deterioration, resulting in very high life cycle cost. The 1993 construction cost of the Colorado Street Bridge rehabilitation was \$27M, providing a new design life of 75 years.

Figure 1 – Comparison Between 6th Street Viaduct and the Colorado Street Bridge (Substructure Replacement Retrofit Alternative)



4. **The DEIR relies upon artificial constraints on the proposed bridge’s width, which have significantly driven the analysis of project alternatives.**

4.1 The City of Los Angeles Department of Transportation (LADOT) recommends the standard width for the 6th Street Viaduct based on the following reasons:

1. 6th Street is classified as a secondary highway in the City’s General Plan. The City standards for highways and streets that are approved by the City Engineer and the City Council and used as a basis for all developer land dedications call for 70 feet curb-to-curb width for a 4-lane highway and 10-foot sidewalks.
2. Currently the roads at either end of the viaduct are not built per secondary highway standards, but this does not justify building a new facility to a substandard cross section. Eventually when developers propose projects at both ends of the viaduct, the City will require land dedication to build the roadway per City standards. The ultimate goal is to have the entire 6th Street width comply with the City’s General Plan.
3. The recommendation to construct the viaduct per City’s standards was not based on "artificial" constraints. It was based on a number of factors, including accidents data, lack of separation between opposing traffic lanes, lack of shoulders, current deficient geometry including horizontal and vertical alignments; the lack of shoulders does not allow room to add bike lanes to be consistent with the 2010 Bicycle Plan.

4. The viaduct needs to be wider at both east and west terminal points to conform to existing conditions. At the east end of the project, the City shares this facility with the State (Caltrans). The 6th Street Viaduct extends over the US 101 freeway and joins the State overcrossing structures across the I-5 freeway. Currently the State's structure is over 70-foot wide. A portion of the 6th Street viaduct is located within State right-of-way and provides access to US 101. In order to meet the State's standards the width needs to be a minimum of 70 feet. At the west end of the project, 6th Street transitions from a 4-lane roadway to a 5-lane to allow for the westbound 10-foot left turn lane onto Mateo Street. A uniform curb-to-curb width is recommended to enhance safety, geometry and meet driver expectations.

4.2 The 6th Street Viaduct is designated as a secondary highway. The existing viaduct's roadway configuration does not meet the City's design standards for a secondary highway because there is no safety median, no outside shoulders to accommodate vehicle breakdowns, as well as bicycles, and inadequate sidewalk width. The roadway width and alignment configurations under the Replacement Alternative are designed to current safety standards to meet the requirements of local/state/federal codes and funding sources.

The guidelines for Historic Bridge Rehabilitation and Replacement by the American Association of State Highway and Transportation Officials (AASHTO) note that substandard roadway geometry may be acceptable for those structures (bridges/viaducts) with average day traffic (ADT) less than about 400. The ADT for the 6th Street Viaduct is approximately 13,000; therefore, under the Replacement Alternative, the viaduct roadway is designed to provide for 4 lanes of traffic, the same as the existing facility, but is wider to meet current standards.

4.3 Based on the reasons explained under 4.1 and 4.2, the FEIR/EIS did not evaluate the alternative to replace the viaduct without upgrading it to meet the current standards.

The Historic Resources Evaluation Report (HRER) prepared for this project as part of the Section 106 consultation did not identify the 6th Street Viaduct footprint as a character defining feature. For the reasons discussed under 4.1 and 4.2, the scope of the project cannot be accomplished within the footprint of the current bridge because 70 feet curb-to-curb is needed to meet City standards and the bridge only has 46 feet curb-to-curb.

5. The DEIR should include study of an additional partial preservation alternative.

5.1 The DEIR did study several partial preservation alternatives including a number of retrofit schemes such as Substructure Replacement. A total of 10 retrofit schemes, which included structure retrofit, replacement of damaged concrete, reconstruction with replication and partial reservation, were evaluated as part of the Alternative Development Process, as documented in Appendix N of the FEIR/EIS. Based on the results of the evaluation, only the Infill Wall and Heavy Steel Casing scheme was found to be a reasonable alternative to be analyzed in the environmental document. The rest of the retrofit schemes were dismissed for not meeting the purpose and need of the project, having major constructability problems, or having unreasonably high cost. For all practicable retrofit alternatives considered, the completed project would provide a limited additional design

life of approximately 30 years (due to continuing ASR damage), and a design seismic event (maximum credible earthquake) within the design life period would likely damage the structure so heavily that replacement would be required.

- 5.2 The DEIR/EIS erroneously stated that the 6th Street Viaduct contributed to a NRHP- and CRHR-eligible district. The 6th Street Viaduct was found to be individually eligible for listing in the NRHP and CRHR. It was also determined eligible as one of a thematic group (erroneously called a district in the DEIR/EIS) of 118 “Historic Highway Arch and other bridges in California” as part of the Caltrans Statewide Bridge inventory in 1987. The information was corrected accordingly in the FEIR/EIS.

6. **The potential mitigation measures under Alternative 3-Replacement in Chapter 3.9 (Cultural Resources) are inadequate.**

- 6.1 The proposed mitigation measure to install two Cultural Heritage Commission plaques at each end of the replacement bridge has been eliminated in the Final EIR/EIS and Section 4(f) Evaluation in response to this CHC comment, and it was not incorporated as a preservation stipulation in the Memorandum of Agreement (MOA) with the State Historic Preservation Officer (SHPO) nor is it included in the CEQA mitigation measures.
- 6.2 The City will consider potential architectural enhancements in the replacement viaduct that will be similar to the existing bridge, and under the MOA and CEQA mitigation measures the design drawings will be submitted to the SHPO for review and comment.

Under MOA Stipulation G, the City is also receptive to relocating architectural elements of the existing bridge, such as the iconic steel arches, to a new location in a public setting. This will be stipulated in the Record of Decision (ROD) approved by Caltrans as a designee of the Federal Highway Administration (FHWA), and in the CEQA mitigation measures approved by the City Council with the Final EIR.

- 6.3 Several stipulations under the MOA are education-related. The City of Los Angeles will include schools in Boyle heights and Downtown Los Angeles on the list of recipients for educational materials produced as part of the relevant mitigation measures under this project.
7. **The proposed location for the retention and reuse of the historic bridge’s original steel arches in the replacement alternatives may be inappropriate.** The existing steel arches cannot be reused as structural load-carrying members for any of the replacement concepts under Alternative 3. The appropriateness of potential re-use or design expressions will be evaluated during the final design phases with input from key stakeholder groups.

One of the stipulations in the MOA states that “the City shall offer artifacts removed from the Viaduct during demolition to local museums, or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations.” The City will work with any interested local museums or other entities with suitable facilities to identify an appropriate reuse/preservation strategy and location for the steel arches, if that is requested, in consultation with local preservationists.

8. **The DEIR is silent on the effects of the proposed alternatives on architectural elements of the subject bridge that are not structurally linked to the 6th Street Bridge.**

8.1 The decorative pylon on the southwest corner of Boyle Avenue and Whittier Boulevard will not be demolished or removed. It is located outside of the project limits.

8.2 The EIR/EIS identifies the tunnel features as part of the historic 6th Street Viaduct property. As Section 3.9.2.5 states, “The boundaries of the historic property include the entire bridge: its abutments, bents and piers, all approaches, the deck, all handrails, streetlight standards and luminaires, the river access tunnel, the steel and concrete arches, the spandrels, and the areas below the decks that contain bridge-related structures.” The FEIR/EIS describes the components of the river access tunnel (Section 3.6.1.2) and the potential impacts to it under Retrofit Alternative and Replacement Alternative (Section 3.6.2.1). Under the Replacement Alternative, the river access ramp, tunnel, and portals could require reconstruction to accommodate the construction of new columns and foundation. The tunnel may be impacted under any of the replacement alternatives depending on how the new west main span abutment/bent is configured. If the selected bridge type requires the tunnel and access ramp to be reconstructed, it could be designed to match the architectural style and theme of the new viaduct, including both the entry access point and the portal at the river bank. The components of the tunnel that would be subject to demolition, if required, would be treated under the same mitigation measures stipulated in the MOA.

9. **The DEIR neglects to cite the Guidelines for Historic Bridge Rehabilitation and Replacement by AASHTO.** The PDT did consider and apply the principles of the AASHTO guidelines, as documented in Section 2.3.2 of the FEIR/EIS for clarity. The guidelines provide a methodology to determine the potential for rehabilitation or replacement of a historic bridge, as outlined in Figure 2.

The 6th Street Viaduct falls into Group VI (*Superstructure/ Substructure Condition, Geometry, and Load-Carrying Capacity Are Inadequate, see Figure 3*) – “Bridges in this group are severely deteriorated and severely deficient. When a bridge is deficient in all categories and those deficiencies cannot be corrected in a feasible and prudent manner, it is very unlikely to have rehabilitation potential.”

Based upon the AASHTO guidelines, it is very unlikely that the 6th Street Viaduct has rehabilitation potential. The primary reasons are:

1. The load carrying capacity of the structure for seismic loading is doubtful considering existing concrete is damaged and continues to be attacked by ASR. Seismic retrofit schemes for concrete structures use drill and bonding techniques into existing concrete to add structural elements to resist seismic demands. However, the existing concrete at 6th Street Viaduct is not dependable.
2. The live and dead load carrying capacity of the structural system will continue to decrease as the concrete ASR continues with time.

Figure 2: Guidelines for Historic Bridge Rehabilitation and Replacement by AASHTO

1. "Provides steps that result in balanced and appropriate decisions. Each step integrates engineering and historic preservation considerations."
2. "Rehabilitation must correct the deficient features using methods that do not require constant maintenance."
3. "When a bridge is deficient in all categories and those deficiencies cannot be corrected in a feasible and prudent manner, it is very unlikely to have rehabilitation potential."

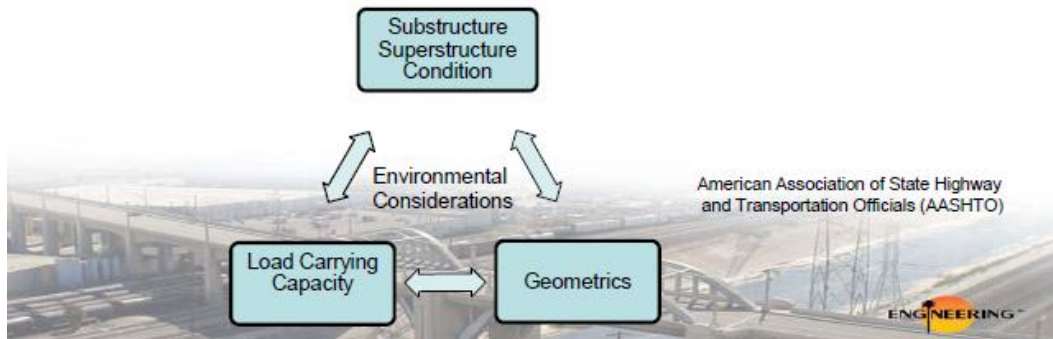


Figure 3: Decision Making Thresholds

I	II	III	IV	V	VI	< ----- Threshold Level
A	A	IA	IA	IA	IA	Load Carrying Capacity
A	IA	A	IA	A	IA	Geometry
A	A	A	A	IA	IA	Super and Sub Structure Condition

A	Adequate
IA	Inadequate

6th Street



- High Rehab Potential
- May Have Rehab Potential
- Not Having Rehab Potential
- Very Unlikely to Have Rehab Potential



3. The horizontal, vertical alignments along with the arch ribs create a safety issue related to sight distance near the 'kink' in the alignment. On such long viaducts, speed control devices and patrolling are not likely to prevent future accidents.

4. Barrier rails are under strength for vehicle impact loads and the shape will not deflect vehicles in a controlled fashion.
 5. Roadway width is substandard with no median or shoulders.
 6. The concrete within the substructure and superstructure is in very poor condition.
 7. Major maintenance work will be required in the future as the ASR will continue.
 8. The retrofit cost is more than 50 percent of the replacement cost.
 9. The life cycle cost of the retrofit is approximately double the replacement life cycle cost.
 10. The seismic criterion for the retrofit is “no collapse.” It is likely that after a design seismic event, the retrofitted structure could be so severely damaged, that it would need replacement at that time.
10. **Mitigation measures MM-4 to MM-15 in Section 4.9 of CEQA Evaluation (MM3-11 to MM3-18 in FEIR/EIS) appear to imply that an MOA has already been executed between SHPO, City of LA, and Caltrans.** The MOA had not been executed by SHPO, the City of Los Angeles, and Caltrans at the time of circulation of the Draft EIR/EIS. As stated in the Draft EIR/EIS mitigation measures pertaining to Cultural Resources (Section 3.9), Caltrans “would consult” with the SHPO regarding a MOA for this proposed project. The Draft EIR/EIS went on to say “the MOA would address the preferred alternative, which has not been determined at this time” (see Section 3.9.4). The “potential mitigation measures” presented in the Draft EIR/EIS (in Chapters 3 and 4, and in the Draft Section 4(f) Evaluation) were offered as “anticipated” measures to be incorporated in an MOA addressing the preferred alternative, which had not been determined at that time. As stated in the Draft Section 4(f) Evaluation (Draft EIR/EIS, Appendix B, Section 4.9.1), “A Memorandum of Agreement (MOA) will be prepared by Caltrans and submitted to FHWA and the SHPO for comment. ... Once FHWA and SHPO agree on the terms and conditions of the MOA, it will be executed and Caltrans will concur. The conclusions of this analysis will be presented in the Final Section 4(f) Evaluation that will be circulated with the Final EIR/EIS.”

The MOA was subsequently approved by all parties in May 2010, and its stipulations are included in the Final EIR/EIS and will be incorporated in the ROD as well as in the CEQA mitigation measures. It should be noted that even if the MOA has been signed, it does not preclude the City of Los Angeles (as the CEQA lead agency) from adopting additional measures to mitigate impacts. The MOA is an agreement document between Caltrans (on behalf of FHWA), the ACHP and SHPO for Section 106 compliance and therefore may be resolved prior to completion of the CEQA process. Section 106 is a federal law and is not tied to the CEQA process. 36 CFR 800.2 allows for integrating Section 106 review into other processes (such as NEPA); although Section 106 documentation may be used to support CEQA studies, it does not replace CEQA. Therefore findings may be different for the two separate laws as well as mitigation measures to resolve adverse effects or mitigate significant impacts. Mitigation MM-17 which is one of the stipulations in the MOA (“*Offer artifacts removed from the viaduct during demolition to local museums, or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations*”) provides an

- opportunity for the City to work with CHC staff and any other interested parties to determine the appropriate way to reuse any requested artifact(s) from the viaduct.
11. **SHPO's role in concurrence with a finding of eligibility and with the HPSR is very unclear.** Per stipulation VIII.C.5.a of the January 1, 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding compliance with Section 106 of the National Historic Preservation Act*, Caltrans must submit the Historic Property Survey Report (HPSR) to the SHPO for concurrence with the eligibility findings. The SHPO has 30 days to respond to the findings of the HPSR. When the 30-day period elapsed after submittal of the 6th Street Viaduct HPSR to SHPO, Caltrans assumed concurrence and proceeded with the project.
 12. **Chapter 2 of the DEIR acknowledges the vote taken by the Community Advisory Committee (CAC) in selecting the "Through Arches Category" replacement bridge type, but does not clarify that this is support for a full replication alternative.** The text in the Final EIR/EIS has been clarified to say that the highest number of CAC votes was for the existing bridge type (Through Arches Category), a bridge type with a design that is similar to the existing viaduct from abutment to abutment (see Final EIR/EIS, Appendix N, Section 3.2.3, Public Input).
 13. **The DEIR's account of the Community Advisory Committee (CAC) actions and comments do not reflect the meeting minutes and the discussion by community members.**
 - 13.1 Section 2.4.2.2, Public Input Subsection of the DEIR, referred to the number of votes received for each bridge type. This information is clarified relative to the CAC vote on the abutment to abutment replication in the FEIR/EIS, as described in response to comment 12.
 - 13.2 The text was revised in the FEIR/EIS to reflect the minutes.
 14. **The DEIR's Cooperating and Participating Agency Mailing List has incorrect contact information for the Office of Historic Resource, Department of City Planning.**
The information was corrected in the FEIR/EIS.

CITY OF LOS ANGELES

CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

BOARD OF PUBLIC WORKS
MEMBERS

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Comment Letter #12

DEPARTMENT OF PUBLIC WORKS
BUREAU OF STREET LIGHTING
1149 S. BROADWAY, STE. 200
LOS ANGELES, CA 90015
ED EBRAHIMIAN, DIRECTOR
(213) 847-2020
FAX: (213) 847-1860
E-mail: streetlighting@lacity.org
World Wide Web (WWW): http://www.lacity.org

July 28, 2009

Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning
Department of Transportation, District 7
100 S. Main Street MS-16A
Los Angeles, CA 90012

RECEIVED
JUL 29 06 2009

SUBJECT: 6th STREET VIADUCT SEISMIC IMPROVEMENT PROJECT - STREET LIGHTING COMMENTS TO DRAFT EIR/EIS OF JUNE 2009

The City of Los Angeles, Bureau of Street Lighting (BSL) has had contact with the author of this Draft EIR/EIS regarding the street lighting design concept for the subject project. However, BSL does have the following comments to the Draft EIR/EIS.

- 1. You did not address nighttime glare and light pollution from both permanent and temporary lighting systems. Except for fixtures that are fabricated to replicate the historical bridge lighting in the 1930s, all new and temporary lighting fixtures should be cutoff and directed away from private property.
2. On Page 16, 1st Paragraph, Last Sentence, it states, "As part of the barrier replacement, the existing luminaires would be replaced with light standards replicating 1930s design." BSL would like to make that sentence clearer by saying, "As part of the barrier replacement, all existing cobra-head luminaires and arms would be replaced with new fabricated ornamental lanterns and pendants replicating the original 1930s design." In addition, BSL would like to insert this new sentence: "BSL is not required to meet current City adopted lighting standards because the Sixth Street Viaduct is protected by the State Historical Building Code. BSL will, however, provide the best feasible illumination levels and uniformity ratios for both roadway and sidewalks."
3. On Page 25, Design Standards Section (for a total bridge replacement alternative), 1st Sentence states, "...designed to meet the City's street design standards." BSL would like to modify it: "...designed to meet the City's current street and street lighting design standards."

If you have any questions or require any additional information, please contact Silva Batikian at (213) 847-1524 and silva.batikian@lacity.org.

Sincerely,

Ed Ebrahiman (signature)

Ed Ebrahiman
Director

L:\\$TRANSIT\BIP\6th St. bridge\Comments to EIR.doc

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

Response to Comment Letter No. 12 – City of Los Angeles Bureau of Street Lighting (BSL)

1. **Nighttime glare and light impacts.** Alternative 3, replacement, could likely include accent lighting. The architecture of the electroliers and fixtures will be determined during the final design phase. Final design of accent lighting will need to address nighttime glare and light effects. Discussion of potential nighttime glare impacts from accent lighting has been added in the Final EIR/EIS (see Sections 3.8.3.1 and 3.8.3.2).
2. **Add language to clarify the lighting requirement.** The paragraph under Section 2.5, Substructure Replacement, of the FEIR/EIS was revised with the wording requested by BSL.
3. **Add language to clarify standard requirement.** This wording change was made in Section 2.3.3.4 of the FEIR/EIS, under Design Standards.

Appendix M Written Comments and Responses on DEIR/EIS

Comment Letter #13



"Wally Stokes"
<Wally.Stokes@lacity.org>
07/30/2009 09:08 AM

To <glaciervp@aol.com>
cc <carlos.montez@dot.ca.gov>, <david_lewis@dot.ca.gov>, "Linda Moore" <Linda.Moore@lacity.org>, <WQuesada@moffattnichol.com>, bcc

Subject RE: 6th Street Viaduct

Thank you Mr. McCutcheon. Your comment has been received and will be given consideration in the preparation of the final version of the EIR/EIS.

wally

From: <glaciervp@aol.com> [mailto:glaciervp@aol.com]
Sent: Wednesday, July 29, 2009 6:08 PM
To: <wally.stokes@lacity.org>
Subject: 6th Street Viaduct

Mr. Stokes,

My name is Richard McCutcheon and I am the general manager of Glacier Cold Storage located at 2233 Jesse Street. The property line at the back of the property I operate borders the bridge property. We also currently utilize the property directly under the bridge as a subtenant of a lease from the city.

My concerns after attending the meeting on Tuesday, July 21, are that our property will be infringed upon during the demolition phase or during the renovation phase (should that option be chosen). This will hamper the operation of my tenant and force him to move to a different facility. This would cause my business great financial harm.

I was told there are technologies available that would allow demolition without such an infringement. I am asking for such technologies to be seriously considered when this project moves forward.

I have made provisions already for a contingency plan to divert our "under the bridge" requirements to another piece of property we have.

I hope this comment goes on record and that it is taken into consideration.

Sincerely,
Richard McCutcheon
Glacier Cold Storage
2233 Jesse Street
Los Angeles, CA 90023
(323) 526-3623
Cell (818) 825-9914
Sent via BlackBerry by AT&T

1
2
3

Response to Comment Letter No. 13 – Glacier Cold Storage

1. **Impacts on business operations from project construction.** Special provisions to protect properties located adjacent to the bridge will be included in the project specifications. Prior to demolition, the contractor will be required to submit the means and methods for demolition for City review and approval. During the demolition period, construction inspectors will ensure that the contractors adhere to the approved plan.
2. **Concern about impacts from demolition.** Special provisions to protect properties located adjacent to the bridge will be included in the project specifications. Prior to demolition, the contractor will be required to submit the means and methods for demolition for City review and approval. During the demolition period, construction inspectors will require the contractors to adhere to the approved plan.
3. **Owner has arranged its own contingency plan to minimize impacts from the project.**
Comment noted.



GAIL FARBER, Director

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: LD-1

August 6, 2009

Mr. Ronald J. Kosinski, Deputy District Director ^{RM}
Division of Environmental Planning
Department of Transportation, District 7
100 South Main Street MS-16A
Los Angeles, CA 90012

Dear Mr. Kosinski:

**NOTICE OF PUBLIC HEARING AND AVAILABILITY OF
DRAFT ENVIRONMENTAL IMPACT REPORT
ENVIRONMENTAL IMPACT STATEMENT
6TH STREET VIADUCT SEISMIC IMPROVEMENT PROJECT**

We reviewed the Draft Environmental Impact Report for subject projects. The proposed 3,500-foot-long 6th Street improvement project is needed to safeguard the critical Los Angeles River crossing from failure in a major earthquake by either retrofitting the existing structure or replacing it entirely.

The following comments are for your consideration and relate to the environmental document only:

Hazards–Flood/Water Quality

1. The proposed project may impact some of the proposed improvements outlined in the Los Angeles River Master Plan (LARMP). The LARMP is available at <http://dpw.lacounty.gov/wmd/watershed/LA/LARMP> for reference. Impacts to the proposed improvements in this area should be minimized. } 1
2. The pollutants of concern listed on page 3-162 are for the Los Angeles River, Reach 1. The proposed project is located in the Los Angeles River, Reach 3. Therefore, this document should list pollutants of concern and appropriate mitigation for the Los Angeles River, Reach 3. } 2

Mr. Ronald Kosinski
August 6, 2009
Page 2

If you have any questions regarding flood/water quality comments above, please contact Mr. Diego Rivera at (626) 458-3978.

If you have any other questions or require additional information, please contact Mr. Toan Duong at (626) 458-4945.

Very truly yours,

GAIL FARBER
Director of Public Works



for DENNIS HUNTER, PLS PE
Assistant Deputy Director
Land Development Division

MA:ca

P:\ldpubl\CEQA\CDM\Caltrans - 6th STREET VIADUCT SEISMIC IMPROVEMENT PROJECT_NOP\DEIR.doc

Response to Comment Letter No. 14 – County of Los Angeles Department of Public Works

1. **Impact to Los Angeles River Master Plan (LARMP).** The EIR/EIS analyzed potential impacts to the Los Angeles River (See Sections 3.10 and 3.11). With the exception of Bridge Concept 1, implementation of any alternative alignment and bridge concept would not affect river hydraulics and designated beneficial uses of any range of the Los Angeles River. Since bridge Concept 1 is not the preferred alternative, no impact to the LARMP is anticipated. In addition, the various bridge replacement concepts have been developed keeping in mind compatibility with the Los Angeles River Revitalization Master Plan (LARRMP) which was developed to be consistent with the LARMP. Issues, such as river access, structural impediments, and aesthetics, were part of the screening criteria of the proposed options.
2. **Incorrect information about pollutants of concern.** The text in Section 3.11.2 of the FEIR/EIS regarding the pollutants of concern has been revised.

Appendix M Written Comments and Responses on DEIR/EIS

Comment Letter #15

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

PUBLIC UTILITIES COMMISSION

320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013



August 13, 2009

Wally Stokes
City of Los Angeles-Dept. of Public Works
221 N. Figueroa, Suite 350
Los Angeles, CA 90012

Dear Mr. Stokes:

Re: SCH# 2007041015: 6th Street Viaduct Seismic Improvement Project

The California Public Utilities Commission's (Commission) Rail Crossings Engineering Section (RCES) is in receipt of the *Notice of Completion & Environmental Document Transmittal- Draft EIR* from the State Clearinghouse for the City's proposed 6th Street improvement project that includes possibly retrofitting the existing structure or replacing the existing grade separation over the BNSF, Union Pacific Railroad Company, Metrolink and Los Angeles County Metropolitan Transportation Authority tracks.

The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings. A request for authorization must be submitted to RCES. The design criteria of the proposed project must comply with Commission General Orders (GOs), such as, GO 26-D: "Clearances on railroads and street railroads as to side and overhead structures, parallel tracks and crossings."

1

City should arrange a meeting with RCES staff to discuss relevant safety issues and requirements of for authority to modify the existing 6th Street overpass (CPUC crossing number 101 RI-483.65-A, U.S. DOT number 811256T).

2

Thank you for your consideration of these comments and we look forward to working with the City on this project. If you have any questions in this matter, please contact Sergio Licon, Utilities Engineer at 213-576-7085, sal@cpuc.ca.gov, or me at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

Response to Comment Letter No. 15 – State of California Public Utilities Commission

1. **Project construction requires Commission approval.** A request for authorization will be submitted to the Rail Crossing Engineering Section (RCES) during the final design phase. The design criteria of the project will be in compliance with the General Orders (GOs), including GO 26-D. The required approval from the California Public Utilities Commission has been added to Section 3.6.2 of the FEIR/EIS.
2. **A meeting with RCES is suggested.** A mitigation measure requiring the City to meet with RCES staff during the final design phase to discuss safety issues and rail crossing replacement permit requirements was added to Section 3.6.3 of the FEIR/EIS.

Central City East Association

CCEA

Business Improvement Districts

- Arts District
- Toy District
- Los Angeles Downtown Industrial District

Comment Letter #16



Board of Directors

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Young's Market Company

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Los Angeles Cold Storage

Treasurer
Mark Shinbane
Ore-Cal Corporation

Emesi Doizaki
American Fish and Seafood

Richard Gardner
LA Wholesale Produce Market

Donald Kanner
City Sea Foods

Howard Klein
Ocean Beauty Seafood

Matt Klein
Factory Place Lofts

Michael Tansey
Peterson/Tansey

Richard Meruelo
Alameda Produce Market Inc.

William Shinbane
Ore-Cal Corporation

Chairman Emeritus
Charlie Woo
Mega Toys

Executive Director
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Managing Director
Raquel King

Director of Operations
Vicky McCormick

**Deputy Director
of Operations**
George Peterman

**Director of Marketing
& Community Relations**
Gathryn Brehm

Executive Assistant
Herlinda Chico

August 14, 2009

Department of Transportation – District 7 *M*
State of California
100 S. Main Street
Los Angeles, CA 90012-3606

RE: 6th Street Viaduct Seismic Improvement Project
Draft EIR/EIS

For the last 23 years, the Central City East Association has served as the principal voice and advocate of eastern Downtown Los Angeles. We are a 501(c)(6) not-for-profit organization that administers the Arts District, Toy District and Downtown Industrial Business Improvement Districts (BIDs). Through these three BIDs, we represent 1,100 property owners, 1,600 businesses, and 15,000 employees. Our BID districts span 110 blocks of Downtown L.A.

The Arts District BID spans the area roughly bounded by the 101 freeway, Alameda, 7th Place and the Los Angeles River. The Arts District community is evolving from a traditional manufacturing base with a vibrant artistic community to an increasingly 24-hour live/work neighborhood with new and varied amenities that include fine dining and after-hours establishments. The heavy industrial and more modern uses are thriving successfully side-by-side, placing increasing demands on mobility within and into the district.

Our members have been closely following the 6th Street Viaduct Seismic Improvement Project. We have attended meetings, hosted briefings, and communicated regularly with representatives of both City and State agencies. We understand the importance and significance of this project, but we must take this moment to underscore the potential for serious impacts to the economic vibrancy of the Arts District.

During the period the Viaduct will be under construction, our members will not only be inconvenienced due to the required detours. Their businesses will suffer economic hardships. The Arts District is home to large national distribution warehouses and food processing centers. Both rely on the local streets for goods

1

725 South Crocker Street Los Angeles CA 90021-1411 213.228.8484 fx 213.228.8488 www.centralcityeast.org

movement and connections to freeways and highways en route to the ports, the airports, and for ground routes. Some businesses here today will survive the Viaduct project; others may not. These business stakeholders require considerable lead time to prepare for a change in how they do business. Some of these businesses cannot relocate; for others, relocation would require months of pre-planning, if not longer, due to the logistical requirements of their distribution commitments.

1

These types of businesses are not sure what to anticipate. They understand that the final design decisions have yet to be made. Nevertheless, they are facing an uncertainty that could cost them their future. Therefore, we urge you to give the highest priority to a business information campaign and the hiring of a business impact specialist whose only responsibility would be to resolve the challenges this project will impose on businesses in the project zone.

Potential impacts to business will go beyond those posed by street closures and detours, of course. Dirt and debris, the environmental hazards in the materials, soil, groundwater and air, will all contribute to an unhealthy working and living environment for Arts District stakeholders. Fortunately, Arts District business and live-work stakeholders are a highly connected population, presenting you with an opportunity to use a message distribution network that communicates with stakeholders directly using the latest technology. It will be incumbent on you to maintain on-going dialogue with our stakeholders informing them of the environmental impacts on a day-to-day basis.

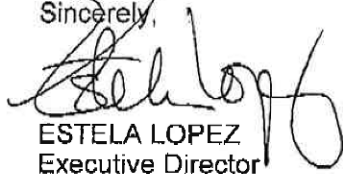
2

Finally, considering the replacement of the historic 6th Street bridge and the loss of the historical elements on the west side of the river (the tunnel entrance leading to the Los Angeles River has a concrete decorative Art Deco railing that corresponds with the historical classic styling of the bridge), we are anticipating that this project will include elements that will contribute to the cultural, health and wellness of the community that will host the detrimental impacts of the project for years. For example, Arts District property owners, residents and business have long desired green space. The Viaduct project provides an opportunity within the newly created underside for this green space with elements such as a park/pocket park, dog park, dog run etc. that can be utilized by residents and employees of the local businesses.

3

Thank you for this opportunity to submit our comments and respectfully request that you take them into consideration in your on-going decisions regarding this project.

Sincerely,



ESTELA LOPEZ
Executive Director

cc: Hon. Gil Cedillo, State Senator
Hon. John Perez, Assemblyman
Hon. Jose Huizar, City Councilman

Response to Comment Letter No. 16 – Central City East Association

1. **Viaduct construction could lead to the permanent closure of some area businesses. Considerable lead time is required to prepare and implement coping measures, including relocation.** The City will work with the businesses within the project area to help mitigate the impacts. The relocation assistance program would be part of this process.
2. **Arts District business and live-work stakeholders are a highly connected population, presenting an opportunity to use message distribution networks that communicate with stakeholders directly.** As described in several sections of the EIR/EIS, a Traffic Management Plan (TMP) would be developed to assist local businesses in continuing operation during the construction period. The TMP would identify and provide alternate traffic detour routes, pedestrian routes, and commercial access routes to be used during the construction period. In addition, the City-mandated Work Area Traffic Control Plan (WATCP) would be strictly implemented by the contractor during project construction. The Arts District message distribution network will facilitate interaction and communication with the affected business community during development of the TMP.
3. **The Viaduct project provides an opportunity within the newly created underside for this green space with elements such as a park/pocket park, dog park, dog run, etc. that can be utilized by residents and employees of the local businesses.** While open space in the form of right-of-way (ROW) parcels underneath and adjacent to the viaduct footprint would occur as a result of property acquisition for the preferred alternative, no use of this property has been determined at this time. Interested parties have expressed varying ideas for the disposition of this land, which will be the subject of future planning and community input.

Kochaon, Anne

From: John McShane [john_mc@StoverSeed.com]
Sent: Friday, August 14, 2009 11:16 AM
To: wally.stokes@lacity.org
Subject: Comment to Draft EIR

August 14, 2009

TO:
Mr. Wally Stokes
Environmental Coordinator
City of Los Angeles Bureau of Engineering
Wally.stokes@lacity.org

Mr. Carlos Montez
Caltrans District 7
Environmental Planning Department
Carlos.montez@dot.ca.gov

Mr. Sam Wong
Senior Real Estate Officer
City of Los Angeles, Dept of Public Works
1149 S. Broadway, Ste 610
Los Angeles, CA 90015
Sam.wong@lacity.org

FROM:
STOVER SEED COMPANY
Stephen Knutson, CEO
John McShane, President
1415 E. 6th Street
Los Angeles, CA 90021
Stephen_k@stoverseed.com
John_mc@stoverseed.com

**Response to Draft EIR/EIS, 6th Street Viaduct Improvement Project.
Parcels 51, 52, 53, 54 corner of 6th Street and Mateo Street and parcel 4 on Willow Street.**

Gentlemen:

Stover Seed Company is an 87 year old family business that has been operating at the corner of 6th and Mateo streets since the mid 1950's. We are a seed blending, packaging and distribution company that services the consumer and commercial markets. Among our customers are the City of Los Angeles, LAUSD and Caltrans. We currently have 19 full-time employees and 19 part-time employees. 15 full-time employees work out of our offices and warehouse on 6th street.

We have reviewed the draft EIR/EIS and participated in several project information meetings concerning this project. Any of the alternatives proposed in the report will have a material impact on the operation of our business.

The various options listed in the report all require that the bridge be widened which would eliminate the 6th street frontage road. The frontage road provides the only access to our parking lot. While there is access to our office and warehouse from the loading dock on Willow Street (parcel 4) the access is not safe for customers nor is there parking available.

The elimination of the 6th Street frontage road will:

1. Eliminate access to our 12 vehicle parking lot.
2. Force employees and customers to find parking on nearby streets that are already at capacity during normal work hours.
3. Render the parking lot space useless and inaccessible.
4. Eliminate customer access to the front door of our offices and create only one exit for office employees in the event of an emergency.
5. Force customers to enter our business through the rear, via Willow Street and enter the offices through the warehouse creating safety and security issues.
6. Eliminate small parcel delivery and flatbed truckload deliveries at our front warehouse doors.
7. Eliminate egress of our fork lift to unload trucks on Willow Street where we store some bulky materials.

Section 5.5 of the draft states that a survey of business operations was done that “identified issues and concerns.” While our firm was visited early in the process and a few, brief questions were asked, there was no mention of the bridge project nor was there any attempt to identify ‘issues of concern’ that such a bridge project would create. Only within the last month have city officials visited our firm to identify and discuss the issues listed above.

We realize that that bridge project needs to go forward and ask that the agencies involved in this project consider the impact on a long standing, small business that is a stable employer and contributes to the city tax base. Stover Seed Company wishes to remain a downtown business. We are available and willing to work with the city to resolve the issues that we face.

Sincerely,

Stephen Knutson, CEO

John McShane, President

Response to Comment Letter No. 17 – Stover Seed Company

See responses next page.

1. **Concern over impacts to business operations.** See response to comment 2. As indicated in the EIR/EIS (Section 3.4.3.1), the one-way service/frontage road north of the viaduct between Mateo Street and Mesquit Street would be removed and relocated for the Replacement Alternative, which would require acquisition/ relocation of businesses along this road. This impact cannot be avoided with the Replacement Alternative, and mitigation measures are identified in the EIR/EIS.
2. **Business survey did not ask for issues and concerns.** The purpose of the business survey was to understand the operations of each of the businesses and to use this information to document the potential relocation and access impacts in the EIR/EIS. The survey was completed during the early stages of design. At the time the survey was completed, the preferred alignment was not identified, and the right-of way (ROW) impact was not established. The potential impacts to ROW were considered during preparation of the draft environmental document. The overview of potential impacts was presented at the public hearings for the Draft EIR/EIS. The City has been meeting owners at their request to discuss these impacts. The intent of the survey was not to discuss these issues.
3. **Understand the project is needed, but still want to remain in Downtown.** We appreciate your understanding of the situation and will work with all affected business owners. For more information, please see Chapter 3.4, “Community Impacts – Relocation and Business Disruptions,” and Appendix D, “Summary of Relocation Benefits.”



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E-MAIL: kbrogan@hillfarrer.com
WEBSITE: www.hillfarrer.com

August 14, 2009

By E-mail and U.S. Mail

Carlos Montez
Senior Environmental Planner
California Department of Transportation
100 S. Main Street
Los Angeles, CA 90012
Carlos.montez@dot.ca.gov

Jim Wu, P.E., Project Manager
City of Los Angeles
Bridge Improvement Program
221 N. Figueroa St., Suite 350
Los Angeles, CA 90012
jim.wu@lacity.org

Wallace E. Stokes III
Bureau of Engineering
Bridge Improvement Project
City of Los Angeles
221 N. Figueroa Street, Suite 350
Los Angeles, CA 90012
wally.stokes@eng.lacity.org

Re: 6th Street Viaduct Seismic Improvement Project
Our client: Spilo Worldwide, 585 and 589 S. Santa Fe Ave.

Gentlemen:

This firm represents Spilo Worldwide which operates its business at 585 S. Santa Fe Avenue, 589 S. Santa Fe Avenue, and 1435 East Sixth Street (the north side frontage road). This is a follow-up letter to my letter of June 29, 2009. As noted previously, Spilo owns the property on Santa Fe and leases the Sixth Street parcel. The City of Los Angeles has told Spilo that of the various alternatives under consideration, the City and/or State may take Spilo's property as part of the 6th Street Viaduct Improvement Project. This letter sets forth Spilo's additional concerns with respect to the impact of the proposed project on its business and Spilo requests that the City and State respond to these issues in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

First, we believe it is important for the FEIR/FEIS to consider the cumulative effect of other projects in the vicinity. The most significant project, besides the subject project, is the voter-approved high speed rail line. We believe this cumulative impact should be studied.

1

Second, while various city and state personnel have verbally advised Spilo that it may not need to move, we note that the draft EIR/EIS is replete with references to the anticipated demolition of Spilo's buildings. For example, Page 2-28 refers to "Demolition of adjacent

2

Carlos Montez
Wallace E. Stokes III
Jim Wu, P.E.
August 14, 2009
Page 2

Comment Letter #18 cont'd

buildings...west of Los Angeles River,” Page 3-3 states that the uses in some buildings located adjacent to the viaduct footprint would need to be relocated, Page 3-17 addresses additional property acquisitions resulting in the loss of industrial buildings, Table 3.4.2 references the full acquisition of the Spilo buildings, and Pages 3-20 and 3-21 refer to the conversion of industrial uses to other uses, in conflict with the plans of the City of Los Angeles, would be unavoidable. If Spilo’s buildings are to be taken for this public project, Spilo will need ample time to relocate and would prefer to relocate in the immediate vicinity of its current location, to best maintain its substantial business goodwill. This should be a mitigation requirement referenced in the FEIR/FEIS.

2

We further note that the FEIR/FEIS references the probable lack of access during construction, and this must be addressed as well.

3

Finally, we reiterate that Spilo is an active and vibrant business, has many employees who depend upon Spilo for the support of themselves and their families, and therefore all efforts should be made to retain the business goodwill and the jobs, particularly in this economy. We urge the FEIR/FEIS to include a mitigation measure providing substantial notice and lead time before any potential acquisition of the property. The minimum ninety (90) day notice to relocate, referenced in the DEIR/DEIS, is woefully inadequate and would result in a total loss of the business. To complete an orderly relocation, Spilo estimates it needs a full eighteen months from the written notice that the project will proceed. Of course, Spilo will also need economic and other assistance from the lead agencies to ensure that an orderly relocation can occur without bankrupting the company.

4

Some Additional Points.

In addition to the above, Spilo has noted what appear to be errors in the documents, and we will address these in no particular order:

1. 2.3.3.3 Street Design. The second paragraph of Page 2-25 refers to “existing buildings on the north side of the viaduct west of Mateo Street would need to be removed.” We believe that “west” is incorrect, and it should state “east” instead of “west.”

5

2. 3.1.4 Resources Resulting in No Impacts. Paragraph 3 of Page 3-3 states: “Based on field observations by the consultant team, no residential dwellings are located in or adjacent to the 6th Street Viaduct footprint. The proposed project would not require the acquisition or displacement of residential housing...” This is incorrect. There is at least one residential dwelling, and perhaps more, on the southerly side of Willow Street, east of Mateo.

6

We reiterate that Spilo recognizes the importance of this project, but requests that the City and State fully consider the impacts of the project on local businesses, and completely

7

Carlos Montez
Wallace E. Stokes III
Jim Wu, P.E.
August 14, 2009
Page 3

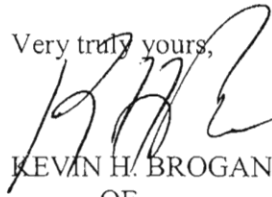
mitigate those impacts, so that private citizens and businesses are not damaged by this public project.

7

Please make this letter part of the record of the draft EIR/EIS. Feel free to contact me if you need additional information. Thank you.

8

Very truly yours,



KEVIN H. BROGAN

OF

HILL, FARRER & BURRILL LLP

cc: Spilo Worldwide

KHB:hjp

HFB 893810.1 S6816002

Response to Comment Letter No. 18 – Hill, Farrar & Burrill LLP (representing Spilo Worldwide)

1. **High speed rail line should be considered as part of cumulative impacts.** A more thorough analysis of cumulative project effects, including the proposed high speed rail, on various environmental resources in the area has been conducted and is presented in Section 3.26 of the FEIR/EIS. It should be noted that the 6th Street Viaduct Seismic Improvement Project is not a capacity-enhancement project; therefore, after completion, it would not contribute to cumulative traffic impacts in the future. The traffic impact of the 6th Street Viaduct replacement would occur during construction, when traffic is diverted to other local streets from 2014 to 2017. It is assumed that the high speed rail project would not be implemented before completion of the 6th Street Viaduct replacement; therefore, there would be no cumulative construction impacts from these projects.
2. **Unsure if the business needs to be relocated.** See response to the previous Spilo Worldwide comment (June 29, 2009, letter) on this matter (Comment Letter No. 1, Response No. 1).
3. **Possible lack of access to nearby businesses during construction.** The design team is carefully evaluating methodologies for demolition and construction to minimize access impacts to local businesses.
4. **The minimum ninety (90) day notice to relocate, referenced in the DEIR/DEIS, is woefully inadequate. Spilo estimates that it would need a full eighteen months from the written notice that the project will proceed, in addition to other assistance from the lead agencies, to ensure that an orderly relocation can occur without bankrupting the company.** The commenter's concerns are noted. The requirement to vacate following issuance of a ninety (90) day notice would be administered in accordance with the Uniform Relocation Act and consistent with Caltrans relocation guidelines 24.203 (c1, c2, c3):

Ninety-day notice:

1. General. No lawful occupant shall be required to move unless he or she has received at least 90 days advance written notice of the earliest date by which he or she may be required to move.
 2. Timing of Notice. The displacing agency may issue the notice 90 days or earlier before it expects the person to be displaced.
 3. Content of Notice. The 90-day notice shall either state a specific date as the earliest date by which the occupant may be required to move, or state that the occupant will receive a further notice indicating, as least 30 days in advance, the specific date by which he or she must move. If the 90-day notice is issued before a comparable replacement dwelling is made available, the notice must state clearly that the occupant will not have to move earlier than 90 days after such a dwelling is made available.
5. **Noted typographical error.** The error has been corrected in the FEIR/EIS.
 6. **DEIR/EIS indicated no residential dwelling located adjacent to the viaduct footprint. The commenter noted that there is at least one residential dwelling located south of Willow Street.** Land use south of Willow Street and east of Mateo Street is designated as industrial/commercial. This area is located farther outside the viaduct footprint. The EIR/EIS does state that many industrial buildings in the project area have been converted to residential use. It is therefore possible that there is some non-conforming residential occupation within

this industrial designated zone; however, based on the consultants' field observations, there is no residential dwelling located near the viaduct footprint.

7. **Request the City to fully mitigate impacts to local businesses.** Comment is acknowledged. Caltrans and the City are committed to implementing the mitigation and monitoring program stipulated in the EIR/EIS to minimize impacts to area residents and businesses to the extent applicable.
8. **Request that this comment letter be a part of the record.** Comment is acknowledged. This letter is made a part of the administrative record for this EIR/EIS.



1500 Quail Street, Suite 210
Newport Beach, CA 92660
Phone 949.253.7920
Fax 949.253.7923
www.hagerpacific.com

August 17, 2009

VIA E-MAIL AND CERTIFIED MAIL

Mr. Wally Stokes
City of Los Angeles
Department of Public Works, Bureau of Engineering
221 N. Figueroa, Suite 350
Los Angeles, CA 90014-1914
Wally.Stokes@lacity.org

RE: 6th Street Bridge Reconstruction Project
Property Address: 2233 Jesse Street, Los Angeles

Dear Mr. Stokes,

We are the owners of a single story cold storage warehouse building with a two-story office area, totaling approximately 145,000 square feet (noted on the attached diagram). The subject property is located on the north side of Jesse Street between Mission Road and Rio Street and directly south of Whittier Boulevard.

After review of the proposed designs and alignment proposal, we believe that Bridge Concept 4 and Alignment 3B would be most suitable for our property.

We are concerned by the proposed bridge reconstruction project as it will have a significant impact on our property and the existing tenants, Glacier Cold Storage and Cal Hono Freight Forwarders. Specifically:

- The existing bridge is directly behind the property and in one area is directly over the building. What efforts and processes will be used to protect our building during demolition and construction?
- A large area adjacent to and under the bridge is used by our tenants for storage/parking and truck access to the property. How much of our property will be impacted due to demolition and construction?
- What will be the specific time frames that our property and adjacent areas will be impacted for demolition and construction?
- What roadway detours will be enacted? What will be the impact of detours from closures to Jesse Street, Rio, and 7th Street? What will be the impact of closures to S. Mission Road? How will we and our tenants be notified? How much advance warning will we receive?



Mr. Wally Stokes
Page 2



- What compensation will be offered for the use of any areas of our property during demolition and construction? 7
- What compensation will be provided for the loss of storage/parking below the bridge? Also, our tenant will need to add fencing/gates to existing parking area to accommodate large truck access. How will they be compensated? 8
- Will the "Laydown Areas" be available to surrounding businesses for parking if needed? 9

Respectfully,

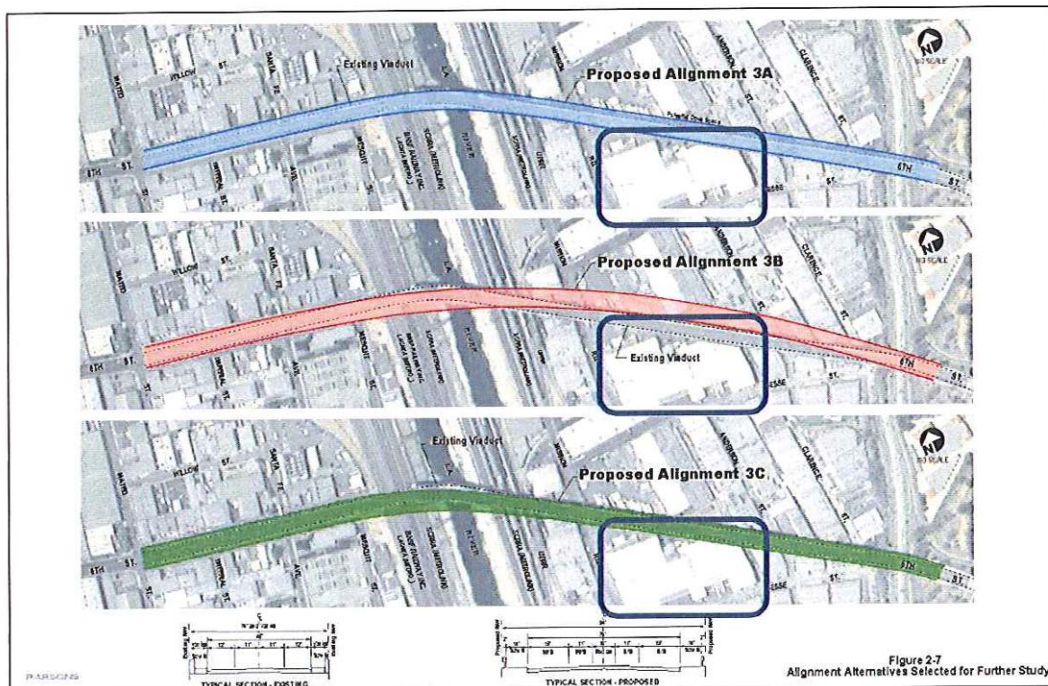
A handwritten signature in blue ink, appearing to read 'Robert Neal', is written over a vertical blue line that extends from the signature down to the name below.

Robert Neal
Managing Partner

Cc: Karen Priesman
Diana Olson

Mr. Wally Stokes
Page 3

Our property outlined on below City Diagrams



Response to Comment Letter No. 19 – Hager Pacific Properties

1. **In support of Bridge Concept 4, Alignment 3B.** Comment is noted.
2. **Concerns on impacts from construction activities to Glacier Cold Storage and Cal Hono Freight Forwarders.** Comment is acknowledged. Responses to concerns raised are provided below.
3. **Measures to minimize impacts during demolition and construction.** Special provisions to protect properties located adjacent to the bridge will be included in the project specifications. Prior to demolition, the contractor will be required to submit the means and methods for demolition for City review and approval. During the demolition period, construction inspectors will ensure that the contractors adhere to the approved plan.

4. **Impacts on the use of area under the bridge.** In discussions between City staff and the property representatives, the owners/tenants stated that they have an existing revocable permit to use the property under the bridge for parking of vehicles. When the City Real Estate Group met with the owners in July 2009, it was made clear that no portion of the property under the bridge would be available for use during demolition of the existing bridge or during construction of the new bridge. The tenant indicated that plans are in the works to relocate from under the bridge to an alternate location. Once the project is completed, the City will evaluate the use of the space under the bridge on a case-by-case basis.
5. **Specific time for demolition and construction.** As described in the EIR/EIS, demolition and construction of Alternative 2 would take approximately 2.5 years and Alternative 3 would require approximately 4 years. The actual construction schedule cannot be accurately predicted until the final design phase is completed.
6. **Request information on detour routes.** Specific traffic detour routes will be developed as part of the Traffic Management Plan (TMP) during the detailed engineering design phase. The TMP will identify specific street closures and alternative access. Input from impacted property owners will be solicited. Please see Figures 3.7-5 and 3.7-6 for the proposed detour routes that were analyzed in the EIR/EIS, and related traffic mitigation measures under EIR/EIS Section 4.9.2.
7. **Asked about the amount of compensation to be received from the City.** Compensation for the use of the property will be based on the appraised value of the land and the length of time that the property will be used by the City. The impacted property owners/businesses will receive fair market value for any project-required taking regardless of whether they are eligible for relocation benefits. Relocation assistance payments and counseling will be provided to eligible persons and businesses in accordance with the Uniform Relocation Act.
8. **Asked about compensation for the loss of storage and parking below the bridge.** There is no compensation for loss of parking under the bridge; the City will revoke the revocable permit per agreement as stated in the permit. As to the question of fencing, this will be considered on a case-by-case basis and, depending on what fencing will have to be removed for the bridge replacement, compensation will be made accordingly.
9. **Asked if the City would provide space for parking if needed.** It is unlikely that the contractor's laydown areas would be available for temporary parking for businesses during project construction.

August 17, 2009



Gary Lee Moore
Los Angeles City Engineer
Bureau of Engineering
221 N. Figueroa St. Suite 350
Los Angeles, CA 90012

Dear Mr. Moore:

This letter is written on behalf of the Board of Directors of the Friends of the Los Angeles River, in response to the Request for Comments on the Sixth Street Viaduct Seismic Improvement Project Draft EIR/EIS dated May 2009.

The Friends of the Los Angeles River (FoLAR) supports the vision of a swimmable, fishable, boatable Los Angeles River. We believe that all projects along the Los Angeles River should aid in the process of River restoration, increase open space and improve River access, support community-oriented River use, and promote environmental responsibility.

The Sixth Street Viaduct Seismic Improvement Project offers a critical opportunity to advance all of these goals.

The existing Sixth Street Bridge/Viaduct is one in the unique and iconic set of twelve historic bridges that spans the Los Angeles River downtown. It is a landmark for the Boyle Heights community, for the city as a whole, and for the River itself.

It is unfortunate that the severe deterioration of the bridge through the process of Alkali Silica Reaction (ASR) requires major intervention in order to maintain the bridge's structural safety and viability. However, we view the "Retrofit Alternative" as put forth in the EIR/EIS as unsupportable. This solution is both a costly and relatively short-term fix, and as proposed would severely compromise the historic character and visual appeal of the bridge.

Although we regret the loss of this beloved structure, we feel the correct option is to replace the Sixth Street Bridge/Viaduct with a new structure also of great aesthetic value and symbolic potential.

The specific "style" of the replacement structure is less important than assuring that the design be appropriate, unique and iconic. Throughout history, bridges such as the Ponte Vecchio, London Bridge and the Brooklyn Bridge have become potent symbols of their metropolises.

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323 223-0585 phone 323 223-0585 fax
www.folar.org, mail@folar.org



Page 2, Draft EIR/EIS
FoLAR

In the past decade, a new era of artistry and technical sophistication has yielded a new generation of landmark bridges – Bunker Hill Bridge in Boston, the Erasmus Bridge in Rotterdam, and the recent Sundial Bridge in Redding, California, to name only a few. The Sixth Street Viaduct project should seize the opportunity to create just such a structure for Los Angeles.

Unfortunately, none of the design options for replacement structures offered in the Draft EIR/EIS meet the standards of a unique, world-class design. It is our recommendation that the further design of the replacement structure be envisioned by an internationally-recognized design team, selected through a limited competition process, with strong local and national representation. This process will assure the highest level of design quality while also guaranteeing that the final result is appropriate to its setting.

As it moves forward, the design process should be responsive to the concerns of all the project's stakeholders, including the Boyle Heights community, the Arts District, the downtown development community, and River advocates.

The project also needs to support and advance the goals of the Los Angeles River Revitalization Master Plan (LARRMP). As a part of the "Downtown Industrial Opportunity Area" envisioned by the LARRMP, the Sixth Street Bridge/Viaduct project should address the broader goals of river revitalization put forth by the master plan.

In support of these goals:

The project should incorporate generous, high-quality dedicated bicycle and pedestrian circulation and should create present and future access points to open space along the River for these users. Use of the bridge by bicyclist and pedestrians should be encouraged through the quality of the design experience.

Through its design, the project should enhance the quality of future open space to be created along the River at the base of the bridge, and provide open space along the viaduct support structure to connect the River back into the surrounding neighborhoods on both the east and west sides.

The design should anticipate the eventual elimination or covering of rail lines on both sides of the River in order to increase open space and River access.

The design should incorporate dramatic lighting along its entire length as a way to enhance its value as a landmark to both the neighborhood and the whole of downtown.

The project must be designed to enhance the value of its surrounding neighborhoods for industrial, commercial and residential development. The project can support the goal of industrial development as outlined in the LARRMP but should further catalyze neighborhood improvement to help create a vibrant mixed-use community, one that takes full advantage of its location adjacent to the exceptional resource of the Los Angeles River.

5

6

The project, particularly during the extended period of construction, should help promote ecological restoration of habitat along the River, and help protect or enhance water quality in the River.

Finally, the project should serve as a model of enlightened development along the River, and provide inspiration and guidelines for the further enhancement of the River through downtown.

We appreciate the opportunity to provide our perspective on a project that is crucial to the revitalization of the Los Angeles River, and look forward to future involvement in seeing this exciting project realized.

Sincerely,

(Original with signature to be mailed)

Alex Ward, AIA, Board Treasurer
Friends of the Los Angeles River

Enclosures: Bridge Photos

Cc: Mayor Antonio Villaraigosa
Council President Eric Garcetti
Councilmember Ed Reyes
Councilmember Tom LaBonge
Councilmember Jan Perry
Councilmember Jose Huizar



Bunker Hill Bridge, Boston





Erasmus Bridge, Rotterdam





Sundial Bridge, Redding



Response to Comment Letter No. 20 – Friends of the Los Angeles River

1. **Support projects that provide more open space and improve river access.** Comment is acknowledged.
2. **Recognized that Retrofit Alternative is unsupportable.** Alternative 3, viaduct replacement, has been recommended as the preferred alternative, rather than the retrofit alternative, for the proposed 6th Street Viaduct Seismic Improvement Project (see FEIR/EIS Section 2.4).
3. **Supportive of replacement with a new structure with great aesthetic value and symbolic potential.** As noted in the response to comment 2 above, replacement of the viaduct with a new structure is the preferred alternative. Furthermore, the preferred bridge replacement concept is an iconic extradosed (cable supported) bridge (principle of Bridge Concept 4). This will be a state-of-the-art design for the City of Los Angeles from the stand point of the architectural/structural design. It will be the one of the first extradosed cable stayed bridges constructed in the United States.
4. **The style should be appropriate, unique, and iconic.** See response to comment 3 above.
5. **The proposed bridge concepts presented in the DEIR/EIS do not meet the standard of unique, world-class design. The upcoming design process should be responsive to all project stakeholders.** With the physical constraints on the site, certain bridge types are not appropriate to the setting or feasible to construct, such as a cable-stayed bridge, whereas the three dual-tower extradosed design successfully accommodates these constraints. All of the bridge concepts evaluated were conceived to fit with the family of bridges along the river. The architectural vocabulary of the new bridge could have similar solids and voids to respect the existing bridge massing. If the extradosed is selected, it will be the first of its design in the United States, and it will become a 21st century icon for the City of Los Angeles.

The architectural vocabulary of the replacement bridges received the support of the surrounding community through many public meetings. The design process has included numerous project stakeholders, including the Boyle Heights community.

6. **The project should support and advance the goals of the Los Angeles River Revitalization Master Plan (LARRMP).** The replacement viaduct will provide roadway shoulders for a high-quality bicycle route and up to 10-foot-wide sidewalks for pedestrians. The segment of the river impacted by the proposed project is concrete lined and flanked by heavy industrial uses devoid of habitat. While the City supports the goal of improving habitat at appropriate locations along the river, use of funds dedicated for the proposed bridge seismic improvement project would be inappropriate because it is not the proposed project's purpose, nor would the project adversely impact habitat.

Kochaon, Anne

From: Wally Stokes [Wally.Stokes@lacity.org]
Sent: Wednesday, August 19, 2009 5:57 PM
To: carlos_montez@dot.ca.gov; david_lewis@dot.ca.gov; Jim Wu; Linda Moore; Kochaon, Anne; Bingham, Jeffery
Subject: FW: Comments on 6th Street bridge DEIR

Comments of Portia Lee

From: "portia" [mailto:calarchv@sbcglobal.net]
Sent: Wednesday, August 19, 2009 5:38 PM
To: <wally.stokes@lacity.org>
Subject: Comments on 6th Street bridge DEIR

My comments on the Draft DEIR follow. I know it represents much thought and planning by you, your staff and the consultant.

Comments by Portia Lee/California Archives

The Draft EIR expresses the threefold purpose of the undertaking as 1) the preservation of 6th Street as a viable east-west link between Boyle Heights and Downtown Los Angeles; 2) the reduction of the vulnerability of the 6th Street Viaduct in major earthquake events and 3) the resolution of the design deficiencies of the 6th Street Viaduct. The DEIR discusses purposes 1 and 2 effectively. However, the third purpose is somewhat misleading. The bridge has no *design* deficiencies; it has *condition* deficiencies brought about by the alkali-silica reaction.

1

The original bridge design is an example of the work of a legendary group of engineers led by Merrill Butler who headed the Bureau of Engineering during the period of construction of the nine historic bridges over the Los Angeles River. Intended to connect Los Angeles with Boyle heights, the piers were constructed at angles, utilizing a triangular scheme to allow the bridge to curve toward the community. Each column has a different irregular construction; their geometrical design complements the Streamline Moderne decorative elements. The asymmetrical steel-through arches, a most unusual structural scheme, are living documents in the history of bridge engineering.

None of the Bridge concepts discussed in the DEIR effectively addresses the problem of the loss of historic integrity that each proposes. Replication, in fact, effects the destruction of the aspects of integrity required for the bridge to keep its National Register designation. Concept 1A, replication of the bridge abutment-to-abutment is only mentioned in the draft document as a possibility.

2

The bridge is singularly important in the developmental and architectural history of the City of Los Angeles and references the principles of the City Beautiful movement as an important national concept in city planning. It also demonstrates an unusual use of an important concept in bridge engineering theory. Instead of replication, a restoration of the bridge similar to that of the Colorado Street Bridge and the North Broadway Bridge should be extensively considered, with the intention of addressing the question of the alkali-silica problem ,either by treatment or using new concrete.

With respect to the cable stay bridge proposed as a replacement, it is an interesting and attractive proposal in itself. However, it should **only** be considered for the section of the Bridge which is owned by the State of California and never as a substitute for the City of Los Angeles' historic Sixth Street Bridge.

3

Thank you for your consideration.

Portia Lee
California Archives
6047 Metropolitan Plaza
Los Angeles, California 90036

Response to Comment Letter No. 21 – California Archives

1. **Disagree that the bridge has design deficiencies.** The bridge has structural design deficiencies as a result of the structural reinforcing steel detailing, lack of reinforcing steel, lack of piles, buckling of steel members, capacity of shear keys, column capacities, and barrier rails not being crash-worthy (see the Bridge Inspection Records Information, Structural Inventory and Appraisal Report, Bridge No. 53C-1880, Caltrans, Structure Maintenance and Investigation, August 2006, for a complete list of structural deficiencies). The alkali silica reaction (ASR) deterioration of the concrete is a material deficiency. The bridge also has design deficiencies, such as lack of roadway shoulders and inadequate stopping sight-distance along the curved length of the roadway.
2. **None of the bridge concepts described in the Draft EIR effectively addresses the problem of loss of historic integrity that each proposes.** As discussed in the EIR/EIS (Section 3.9.3.2, Alternative 3-Replacement), all of the replacement alternatives, including replication, would demolish the 6th Street Viaduct to build a new structure. The existing viaduct would be replaced with one of six bridge concept designs on one of three alternative alignments under consideration. Implementation of Alternative 3 would result in the physical destruction of the historic property, and it would result in a finding of adverse effect pursuant to 36 *Code of Federal Regulations* (CFR) Part 800 and would presumably result in loss of National Register eligibility. Concept 1A, replication of the bridge abutment-to-abutment, was considered in response to public input. However, it would not constitute an historic reconstruction consistent with the Secretary of Interior’s standards given that modern materials and seismic design would be employed, and the new viaduct would have a greater roadway width (70-foot [ft] curb-to-curb width versus existing 46-ft width) to meet federal funding criteria.

Any restoration of the existing bridge would have significant impacts to the historic features of the viaduct. The partial preservation (retrofit) alternatives considered in the EIR/EIS would provide an additional design life of only 30 years, which is unacceptable from a life-cycle cost standpoint. The viaduct suffers from a condition known as ASR (see EIR/EIS Section 1.5.2), which is essentially a concrete “cancer” that over time weakens the concrete’s strength and limits the ability to retrofit (preserve) the bridge to current seismic safety standards. There are no known methods to reverse or stop the ASR deterioration of the concrete. Laboratory testing indicates that deterioration due to ASR will continue, furthering the structure’s vulnerability to collapse in a seismic event.

3. **Not in support of a cable stay bridge.** Comment is acknowledged.

AUG-24-2009 MON 06:30 PM U. S. E. P. A

FAX NO. 4159473564

P. 02

Comment Letter #22



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

August 24, 2009

Carlos Montez *CM*
California Department of Transportation
District 7
100 S. Main Street
Los Angeles, CA 90012

Subject: Draft Environmental Impact Statement for the 6th Street Viaduct Seismic Improvement Project (CEQ# 20090226)

Dear Mr. Montez,

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the 6th Street Viaduct Seismic Improvement Project (Project). Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA commends the California Department of Transportation (Caltrans) for their efforts to address seismic and safety concerns that prompted the proposal for the Project. EPA also understands that both Alternative 2 (Retrofit) and Alternative 3 (Replacement) could provide a net long-term benefit to the greater Los Angeles region.

EPA has identified areas where additional information or further analysis is needed. EPA's enclosed detailed comments include a request for broadening the scope of the alternatives analysis, as well as a request for the inclusion of a more rigorous cumulative impacts analysis. Through the enclosed detailed comments, EPA also highlights specific concerns and recommendations regarding: 1) historic and cultural resources, 2) environmental justice, 3) aquatic resources, 4) air quality/construction mitigation, and 5) bike/pedestrian facilities. For these reasons, we have rated the DEIS as *Environmental Concerns-Insufficient Information (EC-2)*. Please see the enclosed "Summary of EPA Rating Definitions".

We appreciate the opportunity to review this DEIS. When the Final EIS is released for public review, please send one (1) hard copy and one (1) CD-ROM to the

Printed on Recycled Paper

Appendix M Written Comments and Responses on DEIR/EIS

AUG-24-2009 MON 06:30 PM U. S. E. P. A

FAX NO. 4159473564

P. 03

Comment Letter #22 cont'd

address above (mail code: CED-2). If you have any questions, please feel free to contact
Connell Dunning, Transportation Team Leader, at (415) 947-4161, or Jarrett Stoltzfus,
the lead reviewer for this Project, at (415) 972-3810.

Sincerely,



For

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures:
Detailed Comments
Summary of Rating Definitions

CC: Wally Stokes, City of Los Angeles
Mark Cohen, US Army Corps of Engineers
Susan Nakamura, South Coast Air Quality Management District

US EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE 6th STREET VIADUCT SEISMIC IMPROVEMENT PROJECT, LOS ANGELES COUNTY, CA, AUGUST 24, 2009

Alternatives Analysis

Section 1502.1 of the National Environmental Policy Act (NEPA) states that agencies should “present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” While EPA appreciates efforts throughout the Draft Environmental Impact Statement (DEIS) to highlight the benefits of Alternative 3 (Replacement), a more rigorous comparison of the merits of each alternative, including the multiple bridge design concepts considered under Alternative 3, better achieves the purposes of NEPA.

Currently, the Staff Analysis Summary section (pg. 2-55), based on input from a workshop on October 8th, 2008, appears to preference Alternative 3 (Replacement) over Alternative 2 (Retrofit) but does not provide the comparative rationale to fully justify the selection of Alternative 3. Section 2.3.4.1, which describes Alternative 2 - Retrofit, only contains reasons why Alternative 2 is not the recommended alternative, such as high life-cycle cost and geometric deficiencies in that particular Alternative. Section 2.3.4.1 does not provide sufficient information to conclude whether there are reasons why Alternative 2 may be preferable to Alternative 3. For instance, the selection of Alternative 2 could result in fewer impacts to air quality and less disruption to local communities as the result of less necessary construction.

Likewise, Section 2.4.3.2, which describes Alternative 3 – Replacement, does not contain reasons why Alternative 3 may not be preferable. Section 2.4.3.2 only contains a ranking system for consideration of the various alignments discussed in Alternative 3, and not advantages or disadvantages to the selection of Alternative 3 itself. The Alternatives Analysis section should reflect a balanced consideration of the advantages and disadvantages of all Alternatives considered, including the No-Build Alternative.

Further, Section 2.4.3.3, which describes Alternative 3 – Replacement: Bridge Concepts states that “the bridge type does not affect the results of the environmental impact analysis, all five bridge types are documented in this Draft EIR/EIS as viable options for the Replacement Alternative.” (pg. 2-56) However, Bridge Concept 1, Concept 4 and Concept 5 appear to build directly in the Los Angeles River, as they include the construction of a new central support pylon, directly impacting the riverbed during and after construction. The remaining concepts (Concept 2 and Concept 3) do not have a central support pylon constructed in the riverbed and the bridge, in those cases, span the river without the same potential for water quality impacts. The Alternative Analysis should clearly define, in comparative form, the environmental impacts across all Bridge Concepts to help inform decision makers and the public.

1

Finally, the DEIS should fully justify the elimination of any alternatives that would result in fewer environmental impacts than the locally preferred alternative(s). The DEIS must also evaluate the No-Build Alternative as a bench mark against which to compare both the performance and environmental consequences of the other Project alternatives.

Recommendations:

- In the FEIS, expand Section 2.4.3 (Staff Analysis Summary) to reflect a balanced consideration of the advantages and disadvantages of both Alternative 2 and Alternative 3. For example, include a table indicating side-by-side the advantages and disadvantages of each alternative analyzed. This comparison could include life-cycle cost, impact to viaduct footprint, or traffic impacts.
- Assess the environmental impacts of each of the proposed Bridge Concepts and incorporate the results into the analysis of Alternatives Analysis.
- Fully justify the elimination of any alternatives that would result in fewer environmental impacts than the locally preferred alternative(s).

1

Cumulative Impacts

The cumulative impact analysis provided in the DEIS does not fully assess and quantify cumulative impacts associated with the Project, and does not link the Project's effects to the health of the affected resources. Cumulative impacts are defined in the Council on Environmental Quality's NEPA regulations as "the impact on the environment that results from the incremental impact of the action when added to the other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such actions" (40 CFR 1508.7). These actions include both transportation and non-transportation activities. The cumulative impact analysis should consider transportation and non-transportation projects such as large-scale industrial or commercial developments and approved urban and transportation planning projects that are reasonably foreseeable and identified within city and county planning documents.

2

EPA is aware of a number of potential forthcoming projects in the general area over the next few years (e.g. expansion of the I-710 corridor), which, if implemented, could lead to substantial cumulative impacts to air quality, historical resources, etc. in an already highly impacted area.

The recently adopted Los Angeles River Revitalization Plan (pg. 1-8) designated the area covering the 6th Street Viaduct and its surrounding area as the "Downtown Industrial Opportunity area", and makes note of a number of forthcoming projects. The purpose of the plan was to guide the revitalization of the Los Angeles River, which can include changes in land use and development. Likewise, the Central Industrial Redevelopment Project Area Plan (pg. 3-12), which is to the west of the proposed Project, and the Adelante Eastside Redevelopment Project Area (pg. 3-13), which is to

the east of the proposed Project, also are areas where development is proposed and/or planned.

However, the DEIS does not account for the cumulative impact of simultaneous development projects overlapping with the proposed Project. Likewise, the DEIS does not mention the impact of other public or private construction projects in the greater downtown/Boyle Heights area during the 6th Street Viaduct construction period, which combined, could lead to even greater issues with traffic circulation and community and environmental impacts.

The high volume of proposed projects combined with a highly urbanized setting, with low-income and minority communities in an already highly impacted area, demands a thorough cumulative impacts assessment with appropriate mitigation. Specifically, all feasible mitigation should be proposed and committed to along with timeframes for implementation.

While the DEIS acknowledges that the proposed Project does not include capacity addition or changes in traffic patterns (pg. 3-201), it does not include a full, comprehensive report on cumulative effects generated during the construction period. The Traffic Study referenced accounts for general traffic growth and foreseeable projects in the vicinity of the Project after project completion (pg. 3-105), but does not include foreseeable projects and resulting cumulative impacts during the extensive construction period.

Given the extensive cumulative impacts to air and water quality from past major infrastructure projects in the vicinity of the proposed Project, EPA recommends a more comprehensive analysis of cumulative impacts to resources of concern. The Final EIS (FEIS) should include a more robust cumulative impact assessment that effectively discloses: 1) a defined study area for each resource; 2) the health or status of the resource and the historical extent of losses and/or impacts to the resource; 3) the trends associated with those losses and/or impacts; 4) how reasonably foreseeable actions may impact those resources; 5) the Project's contributions to these cumulative effects; and 6) a mitigation strategy and timeframe of implementation to reduce impacts.

Recommendations:

- Include a more robust cumulative impact analysis that includes impacts to resources as well as transportation circulation in the FEIS. EPA recommends Caltrans follow the June 2005 *Guidance for Preparers of Cumulative Impact Analysis* prepared jointly by Caltrans, Federal Highway Administration, and the EPA for this additional analysis. The guidance is a useful reference and is available on-line at http://www.dot.ca.gov/ser/cumulative_guidance/approach.htm
- Include information on cumulative traffic impacts generated during the construction period, both by the 6th Street Viaduct project and other area projects that could affect circulation in the general area as well.

- Include a mitigation strategy to reduce impacts from the proposed project and include timeframes for implementation of all proposed mitigation.

2

Cultural and Historical Resources

Both Alternatives 2 and 3 would have a permanent, adverse impact on the aspects that characterize the 6th Street Viaduct as a historic resource (pg. 4-8). The DEIS indicates that Alternative 2 would result in the alteration of the Viaduct in a manner not consistent with the *Secretary's Standards for the Treatment of Historic Properties*, as the bridge is so structurally deficient that it cannot be rehabilitated to meet minimum seismic requirements without adversely affecting the Viaduct's historic integrity (pg. B-28). Alternative 3 involves the complete removal and replacement of the Viaduct (pg. B-29), and as such, would result in a permanent, irreversible effect on the historic integrity of the bridge.

The DEIS indicates that a Memorandum of Agreement (MOA) will be developed as part of the Section 106 consultation process with the State Historic Preservation Officer (SHPO). EPA recommends that Caltrans and the City of Los Angeles include in the FEIS results of formal consultation with SHPO and any additional comments from agencies with such expertise. Further, Caltrans and the City should ensure that appropriate steps are taken (pgs. 3-148 and 3-149) to preserve as much of the existing viaduct as possible through various means (such as through print or film) before actual alteration or demolition, as well as continue to pursue appropriate mitigation measures with the SHPO as referenced on page 3-148.

3

Recommendations:

- If Alternative 2 is chosen, EPA urges that as many historically relevant features from the original bridge should be retained as possible without compromising the structural retrofit of the bridge itself.
- If Alternative 3 is chosen, it will not be possible to preserve any aspects of the original bridge. However, as the actual design of the bridge (Bridge Concept) is yet to be selected by the Los Angeles City Council, and the choice of final Bridge Concept is independent of potential alignments, EPA urges the selection of a Bridge Concept that embraces many of the same qualities that raised the original value of the 6th Street Viaduct as a historical and cultural resource for the City of Los Angeles.
- Mitigation measures, as well as the complete Section 106 MOA, should be included in the FEIS.

Environmental Justice

According to Executive Order 12898, "To the greatest extent practicable and permitted by law, ... each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on

minority populations and low-income populations. Consistent with this Executive Order, an EIS should fully analyze the environmental effects of the proposed Federal action on low-income or minority populations, and present opportunities for affected communities to provide input into the NEPA process. Guidance issued by the Council on Environmental Quality (CEQ) states that mitigation in impact statements “should reflect the needs and preferences of affected low-income populations (and) minority populations to the extent practicable” (*Environmental Justice Under the National Environmental Policy Act*, CEQ 1997).

The DEIS is thorough in the scope of its treatment of community and environmental justice impacts, as well as community outreach to minimize these impacts, but the scope of the analysis should be broadened with respect to anticipated benefits. Specifically, EPA recommends additional analysis of impacts on commuters, the local workforce and transit.

Local/Commuter Benefits and Impacts

EPA has concerns that the Project disproportionately impacts the local population, which is low-income and minority, when compared to the substantial benefits received from commuters outside of the area, which may not have a similar demographic distribution.

Recommendation:

- Quantify, to the extent possible, the demographics of commuters moving through the project area and include this information in the environmental justice evaluation in the FEIS. The traffic analysis in Section 3.7 noted a strong tendency for directional traffic during peak commute periods, with the dominant flow westbound in the morning and eastbound in the afternoon. The analysis, such as Tables 3.7-1 and 3.7-2, also provided data on where traffic in the corridor originates and departs. This suggests that the facility serves both a local and regional need, and will continue to do so in the future (Figure 3.7-3).

Workforce Issues

While Alternative 3 does not include residential relocation, it does include impacts to area businesses. The DEIS notes that while no local business owners are identified as minority (pg. 3-39), the relocation of existing businesses could cause low-income and likely predominately minority workers to lose their jobs (pg. 3-59). The DEIS goes on to note that the affected business owners would be offered relocation benefits to the extent allowed by law in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The DEIS then notes that “loss of employment would be partially offset by unemployment insurance”, but then recognizes that workers would have difficulty finding new jobs due to the economic downturn (pg. 3-59).

Comment Letter #22 cont'd

Recommendation:

- The FEIS should include a survey of the racial/ethnic and income characteristics of the workforce of businesses that would be relocated under the proposed action (Alternative 3), as well as relief measures that can be taken to preserve or generate new employment for local workers displaced by the Project.

5

Transit

The Los Angeles Metropolitan Transportation Authority (LACMTA) operates two bus lines on the 6th Street Viaduct: Route 18 and MetroRapid Route 720. As Route 720 serves one of the heaviest ridden corridors in the LACMTA system, and LACMTA ridership in general consists of many captive riders and those with low incomes, the projected closure of the 6th Street Viaduct for several years under Alternative 3 - Replacement will result in potentially significant delays for a significant number of bus riders that utilize that particular line. (pg. 3-104)

6

Recommendations:

- The FEIS should include information from the Traffic Management Plan (pg. 4-27) regarding transit impacts, and should quantify the disproportionate impact to low income, minority transit riders as a result of the closing of the viaduct.
- Include descriptions of proposed alternative transit routes and measures to be taken to limit disruptions to current service.

Aquatic Resources

Jurisdictional Waters

The Project may involve the discharge of dredged or fill material into jurisdictional wetlands and waterways. Discharges of dredged or fill material into waters of the U.S. require authorization by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). The Federal Guidelines at 40 CFR Part 230 promulgated under CWA Section 404 (b)(1) provide substantive environmental criteria that must be met to permit such discharges into waters of the United States. These criteria require a permitted discharge to: (1) be the least environmentally damaging practicable alternative (LEDPA); (2) avoid causing or contributing to a violation of a State water quality standard; (3) avoid jeopardizing a federally listed species or adversely modifying designated critical habitat for a federally listed species; (4) avoid causing or contributing to significant degradation of the waters of the United States; and (5) mitigate for unavoidable impacts to waters. A fully integrated DEIS that adequately addresses these criteria would facilitate the CWA Section 404 permit review process. EPA recommends integrating NEPA and CWA Section 404 requirements in the development of the DEIS.

7

A jurisdictional determination by USACE is needed prior to publication of the FEIS in order to provide a determination of potential significant impacts and identify mitigation and avoidance measures in the design of the Project. While Section 3.11 Water Quality and Stormwater Runoff discusses water quality, the DEIS does not address the status of consultation with USACE. The DEIS also does not disclose proposed permanent fill to waters of the United States from a numerical perspective nor does it sufficiently describe the activities proposed relevant to these waters and what functions would be affected with each alternative.

Recommendations:

- The FEIS should confirm whether a jurisdictional determination by USACE is needed prior to publication of the FEIS in order to provide a determination of potential significant impacts and identify mitigation and avoidance measures in the design of the Project.
- The FEIS should include an evaluation of the project alternatives in order to demonstrate the project's compliance with the 404(b) (1) Guidelines and authorization of the Least Environmentally Damaging Practicable Alternative (LEDPA). The alternatives analysis should include a reasonable range of alternatives that meet the Project purpose while avoiding and minimizing damage to waters. If, under the proposed project, dredged or fill material would be discharged into waters of the U.S., the FEIS should discuss alternatives to avoid those discharges.
- The FEIS should disclose for each Alternative:
 - the acreage of waters impacted,
 - the effect to aquatic resource function from the proposed activity. This should be summarized both in the text and in a table format for reader clarity.

7

Avoidance and mitigation of aquatic resources is integral to the future 404 Clean Water Act permit process, yet is not discussed in the DEIS. The DEIS is an appropriate vehicle for the Project proponent to demonstrate compliance with future permit requirements, and EPA advocates that the avoidance and minimization be addressed to the extent practicable in the FEIS.

Recommendations:

- Include information provided in the FEIS so that estimated impacts are provided in acreage estimates. The FEIS should include estimates of acreages of direct and indirect impacts to waters.
- Differentiate between permanent and temporary impacts to aquatic resources.
- The FEIS should include a summary of avoidance and minimization measures for impacts to waters of the United States. This should include a summary of which Bridge Concepts will avoid impacts to aquatic resources. This will be particularly important for proposed impacts to soft bottomed waterways (i.e. turning soft bottom into concrete).

8

- If a discharge is permitted, the FEIS should discuss how potential impacts would be minimized and mitigated. This discussion should include: (a) acreage and habitat type of waters of the U.S. that would be created, restored, or preserved; (b) water sources to maintain the mitigation area; (c) a revegetation plan utilizing native plants; (d) maintenance and monitoring plans, including performance standards to determine mitigation success; (e) an Adaptive Management Plan; (f) the parties that would be ultimately responsible for the plan's success; and (g) contingency plans that would be enacted if the original plan fails. Mitigation should be implemented in advance of the impacts to avoid habitat losses due to the lag time between the occurrence of the impact and successful mitigation.

8

On March 31, 2008, EPA and the Corps issued new regulations ("Mitigation Rule") governing compensatory mitigation to promote no net loss of aquatic resources by improving restoration and protection policies, increasing the effective use of mitigation banks, and strengthening the requirements for the use of in-lieu fee mitigation. These new compensatory mitigation standards emphasize best available science, promote innovation, and focus on results. This rule follows the recommendations of the National Research Council by establishing equivalent, effective standards for all forms of wetland replacement projects under the Clean Water Act. We emphasize that mitigation for impacts to waters of the United States proposed in the FEIS must be consistent with the new rule.

9

Recommendation:

- The FEIS should reflect the new mitigation rule and how the requirements of the new rule will be met by the proposed Project.

Stormwater Pollution Prevention

The proposed action occurs over an impaired section of the Los Angeles River for nitrate, pH and scum.(pg. 3-162). As such, the DEIS mentions that a Stormwater Pollution Prevention Plan (SWPPP) will be prepared and implemented, as a significant amount of construction will occur directly over the Los Angeles waterway. The SWPPP will include a number of Best Management Practices (BMPs) for implementation (at pgs. 3-164 and 3-165), and the DEIS indicates that no additional mitigation will be required.

10

Recommendations:

- In the FEIS, include specific short and long-term commitments outlined and identified in the SWPPP.
- Provide clarification as to the exact structural and non-structural BMPs to be implemented, as well as any remaining impacts to water quality despite mitigation measures.

- Include information in the FEIS on the long-term maintenance plans for permanent structural BMPs in order to ensure long-term utility of the devices on the 6th Street Viaduct.

10

Air Quality/Construction Mitigation

The South Coast Air Basin (SCAB) is currently classified as a non-attainment area for ozone (O₃) and fine particulates PM₁₀ and PM_{2.5} (pg. 3-200). The SCAB has the worst 8-hour ozone, PM₁₀ and PM_{2.5} problems in the nation, and attainment of these NAAQS will require massive reductions from mobile sources, given the rapid growth in this emissions category and the long lifespan of diesel engines. Because of the air basin's non-attainment status, it is important to reduce emissions of ozone precursors, mobile source air toxics (MSAT) and particulate matter from this project to the maximum extent.

The DEIS indicates that the implementation of either Alternative 2 (Retrofit) or Alternative 3 (Replacement) does not project any additional air quality impacts after construction, as vehicle throughput remains the same. The DEIS states that "the project is not a new facility, and does not include the addition of traffic lanes; therefore, no capacity enhancement or change in traffic pattern is anticipated". (pg. 3-201)

While no additional capacity or traffic pattern changes are planned as a result of the Project, EPA has concerns pertaining to the direct and indirect air quality impacts as a result of the construction required for the Project.

Construction Emissions

The DEIS states that estimates of localized direct and indirect emissions do not exceed air quality standards at sensitive receptors (pg. 3-216). We commend the construction mitigation measures detailed on Table 4-6 on page 4-29, based on the lead agency's estimate that peak daily construction emissions with mitigation would exceed the South Coast Air Quality Management District (SCAQMD) daily significance threshold for NO_x. In addition to this issue, and due to the extremely poor quality in the immediate vicinity of the Project, EPA recommends that Caltrans commit to all applicable state and local requirements and the measures listed below in the FEIS and ROD in order to reduce impacts associated with emissions of PM and other toxics from construction-related activities.

11

Recommendations:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to

both inactive and active sites, during workdays, weekends, holidays, and windy conditions.

- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earthmoving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification, where applicable, levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. Because of Project impacts to currently impaired air quality in the Project area and South Coast Air Basin (SCAB), Caltrans should commit to using Tier 4 standards when they become available, and ensuring the use of best available emission control technology for construction equipment that is used prior to Tier 4 standard availability. Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of particulate matter and other pollutants at the construction site.

11

Administrative controls:

- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Meet EPA diesel fuel requirements for off-road and on-highway, and where appropriate use alternative fuels such as natural gas and electric.

- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

11

Mobile Source Air Toxics (MSATs)

EPA recommends an analysis of MSATs should be undertaken for the Project and disagrees with the conclusion in the statement that “FHWA has determined that this project will generate minimal air quality impacts for CAA criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs” (pg. 3-218). For Alternative 3 (Replacement), adverse impacts due to MSATs may occur to the surrounding community due to the traffic generated by a several-year detour in addition to multiple years of construction equipment emissions.

A large number of recent studies have examined the association between living near major roads and various adverse health endpoints. Several well-conducted epidemiologic studies have shown associations with cardiovascular effects, premature adult mortality, and adverse birth outcomes, including low birth weight and size. Traffic-related pollutants have been repeatedly associated with increased prevalence of asthma-related respiratory symptoms in children. Also, based on toxicological and occupational epidemiologic literature, several of the MSATs, including benzene, 1,3-butadiene, and diesel exhaust, are classified as known and likely human carcinogens. Thus, cancer risk, including childhood leukemia, is a potential concern in near roadway environments.

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For additional information on MSATs, please see EPA’s MSAT website <http://www.epa.gov/otaq/toxics.htm>. MSAT analysis is further described in the March 2007 report entitled “Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process” conducted for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment and funded by the Transportation Research Board ([http://www.trb.org/NotesDocs/25-25\(18\)_FR.pdf](http://www.trb.org/NotesDocs/25-25(18)_FR.pdf)). Procedures for toxicity-weighting, which EPA has found to be especially useful for the targeting of mitigation, are described in EPA’s Air Toxics Risk Assessment Reference Library (Volume 3, Appendix B, beginning on page B-4, http://epa.gov/ttn/fera/data/risk/vol_3/Appendix_B_April_2006.pdf).

These recommendations, and the recommendations included in the report for AASHTO referenced above, differ substantially from the FHWA interim guidance (February 2006) on MSAT analysis for transportation projects under NEPA. While there are positive elements to this guidance, especially the willingness to acknowledge potential MSAT concerns, EPA continues to disagree with major elements of this approach nationally.

Comment Letter #22 cont'd

Recommendations:

- In the FEIS, identify homes and sensitive receptors located within at least 200 meters from possible alternatives where there would be increases in truck and construction traffic/idling, increased roadway and rail traffic, construction activities, and staging area activity, and compare these numbers between alternatives. If the project would result in high average daily traffic (10,000 average daily traffic (ADT), for example), then the FEIS should at least identify the total tons per year anticipated for the six most significant MSATs, namely diesel particulate matter (DPM), acrolein, acetaldehyde, formaldehyde, benzene, and 1,3-butadiene, for each alternative.
- Include an assessment of diesel emissions and provide plans for improving air quality through reducing diesel emissions.
- Identify design alternatives and options to further minimize MSAT impacts including indoor air quality improvements for all sensitive receptors within the project area.

12

Bike/Pedestrian Facilities

As Alternative 2 (Retrofit) does not change the width of the viaduct or address viaduct design, Alternative 2 does not cause a loss for bicycling and pedestrian access, but similarly does not provide new mobility opportunities.

However, in Alternative 3 (Replacement), the complete replacement of the bridge creates an opportunity for providing additional bicycle and pedestrian capacity on the bridge, as the new bridge includes wide shoulders as well as a new pedestrian walkway on each side of the bridge.

In all viaducts and Bridge Concepts proposed under Alternative 3, 8 foot wide shoulders are currently planned to be designated as a bicycle routes under the City of Los Angeles Bicycle Plan Policy. In the DEIS, the roadway shoulder appears to be shared use between motorists and bicyclists. As the Bicycle Plan Policy states that any bridge reconstruction or replacement should be designed with adequate roadway to accommodate a bicycle facility (pg. 3-19), Caltrans and the City should ensure that bicyclists are given appropriate, secure access on the replacement viaduct instead of a shared-use facility that could potentially compromise their safety.

13

In addition, while all the Bridge Concepts under consideration are functionally equivalent for the purposes of motorized travel, and the bridge type does not affect the results of the environmental impact analysis (pg. 2-56), the pedestrian experience can vary greatly based on the bridge configuration. Bridge Concept 2 (Cast-in-place Box Girder with Steel Tied Arch Pedestrian Ways) is the only option that provides a significantly separated corridor for pedestrians on the bridge itself, and none of the concepts or viaduct designs appear to provide a pedestrian walkway that is separated from the roadway by a physical barrier, presenting a potentially serious safety issue.

14

Finally, there appears to be no mention of frequency or intensity of light fixtures on the viaduct. If the viaduct is to be increasingly used as a bicycle and pedestrian corridor, improved lighting facilities are critical – especially at night – for pedestrian and bicyclist safety.

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Recommendations:

- If Alternative 3 is chosen, EPA recommends that final bridge concepts include formal eastbound and westbound bicycle routes that are clearly defined, signed and marked, as well as completely separated if possible.
- EPA also urges that the final bridge concept chosen provide appropriate and separated pedestrian accommodations in order to heighten both safety, as well as the aesthetic experience for pedestrians, such as the efforts made in Bridge Concept 2. In addition, the FEIS should include information on the number, location and intensity of light fixtures on the viaduct.

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SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Response to Comment Letter No. 22 – United States Environmental Protection Agency (EPA)

- 1. The Staff Analysis Section of the Draft EIR/EIS does not provide the comparative rationale to fully justify the selection of Alternative 3.** The alternative development process described in Appendix N of the FEIR/EIS provides a summary of the alternative evaluation results, which are presented in Table 3 (for Retrofit Alternatives) and Table 4 (for Replacement Alternatives). The full minutes of meetings and ranking comparisons are available on file for review upon request. A preferred alternative evaluation workshop was conducted on September 29, 2009 to evaluate the various alternatives and identify a preferred alternative, taking into account the results of environmental analysis and the input received during the DEIS/EIR public review period; the preferred alternative evaluation criteria included the factors identified by EPA in these DEIR/EIS comments. The FEIR/EIS provides the result of alternative evaluation in detail as recommended by EPA (see Appendix N).
- 2. Include a more robust cumulative impact analysis that includes impacts to resources, as well as transportation circulation, in the FEIS.** An expanded analysis of cumulative impacts on relevant environmental resources resulting from the proposed action in combination with other projects was prepared and is presented in Section 3.26 of the FEIR/EIS. The expanded analysis was prepared following the *2005 Guidance for Preparers of the Cumulative Impact Analysis* prepared jointly by Caltrans, FHWA, and EPA.
- 3. Results of formal consultation with SHPO should be included in the FEIR/EIS.** As stated in the Draft Section 4(f) Evaluation (Draft EIR/EIS, Appendix B, Section 4.9.1), “A Memorandum of Agreement (MOA) will be prepared by Caltrans and submitted to FHWA and the SHPO for comment. ... Once FHWA and SHPO agree on the terms and conditions of the MOA, it will be executed and Caltrans will concur. The conclusions of this analysis will be presented in the Final Section 4(f) Evaluation that will be circulated with the Final EIR/EIS.” (See discussion in the Response to Comment Letter No. 11, Response 10.) As described in the EIR/EIS and Section 4(f) Evaluation, the MOA stipulation(s) include preserving a record of the viaduct through large-format photography and film/video documentation prior to alternation or demolition.

The executed MOA is incorporated into the FEIR/EIS.

Concerning retention of historically relevant features, the City is receptive to retaining some character-defining features of the existing bridge in the replacement viaduct during the final design and construction phase of project development, as appropriate, based on the bridge type selected. The City is also receptive to relocating architectural elements of the existing bridge to a new location in a public setting, depending on concurrence by the SHPO. This will be stipulated in the Record of Decision (ROD) approved by Caltrans as a designee of the Federal Highway Administration (FHWA).

- 4. Local/commuter benefits and impacts.** U.S. Census records show that within a 3-mile radius of the project area, the demographic composition is 80.9 percent Hispanic/Latino and 19.2 percent Others. These residential areas are located east of the Los Angeles River. Analysis of a 3-mile stretch of residential areas along 6th Street and Whittier Boulevard bounded by 4th Street and 7th Street, using trip generation codes published by the Institution of Transportation Engineers, determined that local trips utilizing the 6th Street Viaduct total approximately 11,500 vehicles per day (out of the daily average of 13,260), and they were predominantly

passenger cars. The following table summarizes the approximate demographic composition of traffic on the 6th Street Viaduct, based on the estimated percentage of local traffic from the eastside:

	Volume (Vehicle per day)	Percentage
Average Daily Traffic	13,260	
Through Traffic		
Truck	790	6
Passenger Car	990	7
Local Passenger Car		
Hispanic/Latino	9,290	70
Others	2,190	17

Based on the above information, it can be concluded that 6th Street serves the local population more than regional commuters.

- Workforce issue.** EPA recommended that the FEIS should include a survey of the racial/ethnic and income characteristics of the workforce of affected businesses. A business survey was conducted during preparation of the DEIR/EIS. All potentially affected businesses were interviewed and asked to provide the information about their businesses, relocation issues, number of employees, and average distance employees live from work. (See the survey questions in Figure 3.4-1 of the EIR/EIS). Out of the 40 businesses interviewed, only a few provided information about their employees. Based on the experience of the original survey, an additional survey to collect specific data on racial/ethnic and income characteristics of the workforce of affected businesses would be unlikely to yield these results. Based on the socioeconomic characteristics of the study area, the environmental justice section of the EIR/EIS has assumed that most workers within the affected area are of low income and predominantly minority. The EIR/EIS also concluded that the proposed project would result in disproportionately high adverse effects on minority and/or low-income populations within the area, which include the workforce. With this conclusion, the City and Caltrans do not believe that the new survey on racial/ethnic and income characteristics of the workforce of affected businesses would change the environmental justice current analysis findings in the EIR/EIS and supporting studies.

It should also be noted that the City staff and PDT have had discussions with many of the business owners within the potentially affected area during the public review period of the Draft EIR/EIS and most of them expressed the interest to remain within the Downtown area; therefore, the workers would have potential to continue their employment with these affected businesses once they are settled into new locations.

- Transit.** The FEIS should include information from the Traffic Management Plan (page 4-27) regarding transit impacts, and should quantify the disproportionate impact to low income, minority transit riders as a result of the closing of the viaduct. The FEIS should include descriptions of proposed alternative transit routes and measures to be taken to limit disruptions to current service. See response to comment 4 for local traffic/demographic composition. Based on this information, it appears that the transit routes along the 6th Street

Viaduct serve primarily a minority population, which is presumed to be low income based on available data analyzed. The EIR/EIS identifies 7th Street as a detour route for Transit Route 18 and MetroRapid Route 720. The EIR/EIS estimated that there would be approximately 0.4-mile of additional travel distance, which would add 5 to 10 minutes of travel time depending on traffic conditions. The City would implement a public outreach program to keep transit riders aware of the construction schedule and the designated detour routes. The City would implement the TMP throughout the construction period to minimize traffic impacts.

7. **A jurisdictional determination by U.S. Army Corps of Engineers (USACE) is needed for the FEIS in order to provide a determination of potential significant impacts and identify mitigation and avoidance measures.** The project potentially involves placement of fill in the Los Angeles River, which is a jurisdictional waterway of the USACE (confirmed via consultation with Ken Wong, USACE Regulatory Division, Los Angeles District, September 2009). The nature of the fill is placement of viaduct piers within the waterway. A USACE Section 404 permit will be obtained during the final design phase.

A summary of the permanent direct impacts, resulting from the fill associated with the viaduct piers, is provided in the table below. Note that some alternatives involve the removal of the existing viaduct’s center pier in the river. For the two alternatives in which the existing viaduct pier is not retrofitted or removed, this is shown as zero in the third column of the table below. The areas shown are of the cross sections of the viaduct piers (impact to waterway). The net new impact would be the increased footprint area, as compared to the existing footprint area.

Alternative	Alternative Viaduct Pier Footprint (acres)	Existing Viaduct Pier Footprint (acres)	Net New Impact to LA River (acres)	Impacted Area of the Channel
1 – No Action (Leave Existing Viaduct)	0.048	0.048	0	N/A
2 – Retrofit	0.048	0.048	0	N/A
3 – Concept 1	0.089	0.048	+0.041	Water Column, Concrete Bottom
3 – Concept 2	0	0.048	-0.048	N/A
3 – Concept 3	0	0.048	-0.048	N/A
3 – Concept 4	0.045	0.048	-0.003	N/A
3 – Concept 5	0.021	0.048	-0.027	N/A
3 – Concept 4A	0.049	0.048	+0.001	N/A

As is evident in the table above, a reasonable range of alternatives has been developed to meet the proposed project purpose while avoiding and minimizing impact to the waterway. Based on the table above, most alternatives would have no or negligible net impact to the Los Angeles River waterway (i.e., they avoid placement of fill in U.S. waters) except for Alternative 3 – Concept 1 which would result in an additional impact. Alternative 3 with the principle of Concept 4 has been identified as the preferred alternative, and it would not place additional fill in U.S. waters. The Los Angeles River in this area is concrete-lined channel, so there would be no soft bottom habitat impact. Because no natural conditions or native vegetation types are present in this portion of the channel or in the immediate vicinity, it does not provide suitable habitat for any special-status plant or wildlife species. The site also does

not contain any federally designated critical habitat areas. Due to the extremely limited biological value of the concrete-lined waterway, the minimal amount of fill is not expected to degrade any local species habitats or other biological resources, and the impact would be considered less than significant. No mitigation would be required beyond the standard conditions that may be included in the Section 404 permit to be issued by USACE. Further discussion regarding the biological resources within the project impact area is provided in Section 3.19.

8. **Impacts to aquatic resources.** The estimated acreages of direct impacts to the Los Angeles channel are provided in the response to comment 7 above. The only potential indirect impact to waters would be the shadowing of the water underneath the viaduct; however, because no significant aquatic/wetlands vegetation exists underneath any of the proposed viaduct alignments, there would be no indirect impacts to aquatic resources from any of the alternatives. This is further discussed in Section 3.19 of the FEIR/EIS.

Permanent impacts to aquatic resources (water column) are those caused by the fill associated with construction of the viaduct piers. As discussed above, because this is a concrete bottom, the only impacts are to the water column/freshwater aquatic habitat.

Temporary impacts to aquatic resources (water column) are those caused during construction, and they would be associated with temporary installation of falsework within the Los Angeles River channel during the construction period. However, construction would be constrained to occur only during the dry season (April 16 to October 14), and the water level within the river would be low; therefore, temporary impacts to waters would be insignificant.

There are no impacts to soft-bottomed waterways because this is already a concrete-lined channel. Alternatives 1, 2, and 3 – Concepts 2, 3, 4, 4A, and 5 avoid impacts to the channel. Only Alternative 3 – Concept 1 has a net fill impact and thus potential impacts to aquatic resources. In general, impact avoidance and minimization measures would be to select an alternative that has no or lesser impact to the waters. Because Alternative 3 with the principle of Bridge Concept 4 has been identified as the preferred alternative, it is anticipated that the project will have no or lesser net impact to waters, and it is assumed that no mitigation will be required.

9. **New mitigation rule pertaining to aquatic resources mitigation should be included in the FEIS.** As stated in response to comment 7, no mitigation would be required beyond the standard conditions that may be included in the Section 404 permit to be issued by USACE.
10. **Stormwater pollution prevention.** Temporary (short-term) mitigation measures to treat storm runoff throughout the demolition and construction processes will be implemented and incorporated into a Stormwater Pollution Prevention Plan (SWPPP), which details the placement, staging, and monitoring of best management practices (BMPs) required for project construction. These BMPs are designed to control discharges of pollutants from regulated construction projects and pollutants from stormwater and non-stormwater discharges. Potential BMPs include limiting construction to the dry season; using non-shattering methods; placing platforms under/adjacent to the viaduct to collect debris; providing watertight curbs or toe-boards on the viaduct to contain spills and prevent materials, tools, and debris from falling from the viaduct; stockpiling accumulated debris and waste generated from demolition away from the channel; and directing water from concrete curing and finishing operations away

from inlets and water courses to collection areas for dewatering, etc. The SWPPP will be prepared by the construction contractor during preparation of the contract documents.

The new viaduct would be designed to capture all of the anticipated runoff for treatment at the permanent BMPs that would be installed within the vicinity of the viaduct prior to discharging to the Los Angeles River. Permanent treatment BMPs considered for the project include detention basins, biofiltration swales, and storm drain inserts (specifically vortex separators). These BMPs would be sized and installed to meet County and City of Los Angeles guidelines. With the BMPs in place, no adverse impacts to surface water quality because of stormwater runoff are anticipated.

Permanent BMPs will be maintained by the Bureau of Sanitation, Los Angeles City Department of Public Works. Maintenance will be performed according to plans and requirements specified in the Los Angeles County Department of Public Works Standard Urban Stormwater Mitigation Plans (SUSMP) for those selected BMPS, which include erosion control measures and cleaning of biofiltration swales, detention basins inspection and vortex cleaning post significant storm events, etc.

11. **Construction emissions.** Most recommendations are included in Section 3.15.4 of the FEIR/EIS.
12. **Mobile Source Air Toxics (MSATs). The FEIS should identify homes and sensitive receptors located within at least 200 meters (600 ft) from possible alternatives where there would be increases in truck and construction traffic. The six most significant MSATs should be analyzed.** Figure 3.15-1 of the EIR/EIS presents the sensitive receptors within proximity of the 6th Street Viaduct Seismic Improvement Project. The closest sensitive receptors (residences) are located approximately 600 feet (less than 200 meters) northeast of the viaduct from the east end. Figures 3.7-5 and 3.7-6 of the EIR/EIS show the detour routes where traffic volumes would increase during construction of Alternative 3 as a result of the viaduct closure (note that Alternative 2 would not require the traffic detour). Residents and business owners residing near the detour routes are located less than 200 meters (656 feet) from the roadway. Emissions of the six most significant MSATs at the locations along the detour routes were quantified, as shown in Table 4-3. Results of the analysis show higher levels of MSATs at certain locations along the detour route and lower levels at locations near the viaduct during the construction period. The proposed project would not result in an increase in MSATs over the long-term because the project does not increase roadway capacity; therefore, it would not result in an increase in traffic through the project area.
13. **Provision of bicycle routes.** The proposed new viaduct would be compatible with the City of Los Angeles newly adopted 2010 Bicycle Plan. The proposed new viaduct design would meet the requirements of the secondary highway standards. It should be noted that the roadways connecting the 6th Street Viaduct east and west of the river contain no bike lanes. It is not the Los Angeles Department of Transportation's (LADOT) policy to stripe bike lanes on a short roadway segment, such as a bridge, that does not connect to adjacent lanes on either end; however, this could be done in the future if the roadways at both ends of the bridge were ever widened to full secondary highway standards (i.e., 70 ft curb to curb) so that bike lanes could be added and a continuous bike facility could be established.

14. **Difference in pedestrian experience on varying bridge types proposed in the Draft EIR/EIS. Only Bridge Concept 2 would provide a significantly separated corridor for pedestrians on the bridge.** The City standards for secondary highways include the following section that is applied to all of the replacement bridge types:
- 11-ft-wide inside lanes, and up to 19-ft-wide outside lanes and 10-ft-wide sidewalks
 - Up to 10-ft-wide median

The sidewalks are elevated with a standard curb between the traveled way and sidewalk. The sidewalks would be provided along the entire viaduct length and are approximately 3,440 ft in length for all the bridge types.

Along the viaduct length, belvederes could be provided for Bridge Concepts 1, 2, 3, 4, and 4A. These belvederes would be for pedestrians and are located outbound of the sidewalks away from the traveled way for comfort to the pedestrian and for viewing at the middle of the river or along the river banks. Across the river spans, Bridge Concepts 1, 2, and 3 also provide crash barriers between the traveled ways, protecting the steel arches from vehicular impact, but they also provide additional separation between the traveled way and sidewalks. In addition, Bridge Concept 2 uses steel tie arches for the pedestrian ways across the river spans, creating a unique pedestrian experience while crossing the river, being separated by a few feet from the viaduct roadway. Bridge Concepts 4 and 4A also provide crash barriers between the traveled ways, protecting the cable stays from vehicular impact, and also providing additional separation between the traveled ways and sidewalks. These barriers extend over the river spans and along the entire cable-supported spans.

This information is provided in Section 3.7.3.2 of the FEIR/EIS.

15. **Information on frequency or intensity of light fixtures was not provided.** This will be determined in the final design. The preliminary cost estimates include light fixtures in accordance with the City of Los Angeles Bureau of Street Lighting standards.
16. **Under Alternative 3, a separate bike route should be included in the final design.** See response to comment 13.
17. **Under Alternative 3, a separate pedestrian way should be included in the final design.** See response to comment 14.



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240



SEP 03 2009

9043.1
PEP/NRM

ER 09/637

Mr. Carlos Montez
Senior Environmental Planner
California Department of Transportation
100 South Main Street
Los Angeles, California 90012
Carlos.montez@dot.ca.gov

Dear Mr. Montez:

The Department of the Interior (Department) reviewed the Draft Environmental Impact Statement (EIS) and Draft Section 4(f) Evaluation for the proposed **6th Street Viaduct Seismic Improvement Project, Los Angeles County, California**. The California Department of Transportation (Caltrans) and City of Los Angeles (City) propose to retrofit or replace an existing historic 1932 bridge to reduce seismic vulnerability, correct design deficiencies, and maintain connectivity between Boyle Heights and downtown Los Angeles.

Section 4(f) of the Department of Transportation (DOT) Act

Under Section 4(f) of the Department of Transportation Act, Federal Highway Administration and other DOT agencies shall not approve the "use" of publicly-owned parks, recreational areas, wildlife and waterfowl refuges, and/or historical sites unless there is no prudent and feasible alternative, and unless all possible planning to minimize harm to the property has occurred.

The bridge is protected under Section 106 of the National Historic Preservation Act and Section 4(f). The Department defers to the State Historic Preservation Officer for Section 4(f) mitigation concerning the bridge. Execution of the Memorandum of Agreement (MOA) should be evidenced in the Final EIS, as is currently planned by Caltrans and the City.

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The proposed mitigation measures identified for the Retrofit Alternative under Section 6.1 and the Replacement Alternative under Section 6.2 on pages B-36 through B-37 should be included in the MOA, though the Department does not suggest that mitigation

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measures be limited to only these in the MOA. The mitigation measures discussed in the Draft EIS are as follows:

For the Retrofit Alternative:

- Incorporation of all applicable Secretary of the Interior's Standards for the Treatment of Historic Properties (36 C.F.R. Part 68) into the design of retrofitting components.
- Installation of two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced. Additionally, installation of two Cultural Heritage plaques at the ends of the bridge would occur on the interior bridge rails in accordance with the City's Cultural Heritage Monument program.
- While the 6th Street Viaduct was previously recorded as part of the Historical American Engineering Record (HAER) program in 1996, contact with the National Park Service (NPS) Historic American Building Survey (HABS)/HAER program would occur prior to any viaduct demolition or construction activities.

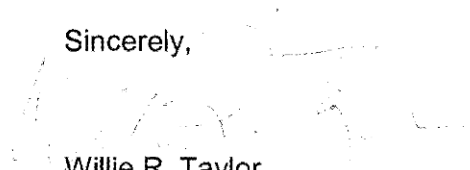
For the Replacement Alternative:

- As with the Retrofit Alternative, installation of two new freestanding informative permanent metal plaques or signage at both ends of the bridge and two Cultural Heritage plaques at both ends of the bridge on the interior.
- As with the Retrofit Alternative, consultation with the NPS HABS/HAER program prior to demolition.
- Production of a documentary (motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the history of the City of Los Angeles. The motion picture or video would be of broadcast quality, of sufficient length for a standard 2-hour program, and would be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries. One copy would be submitted to the Caltrans Transportation Library in Sacramento.
- Production and publication of a book on the Historic Los Angeles River bridges that addresses the history of the monumental concrete bridges of Los Angeles and the place of the subject bridge in that history. The book would include high-quality black-and-white photos of the Los Angeles River Bridges, historic photographs or drawings, as appropriate, and text describing each bridge's location, year built, builder, bridge type, significant character-defining features, and its historical significance.

For questions concerning Section 4(f), please contact Ms. Kelly Powell, Environmental Compliance Reviewer, National Park Service, 168 South Jackson Street, 2nd Floor, Seattle, Washington 98104-2853; telephone (206) 220-4106; kelly_powell@nps.gov.

Thank you for the opportunity to provide these comments.

Sincerely,



Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:
Mr. Wallace E. Stokes III
Environmental Coordinator
City of Los Angeles
221 North Figueroa Street, Suite 350
Los Angeles, CA 90012
wally.stokes@eng.lacity.org

Response to Comment Letter No. 23 – U.S. Department of the Interior

1. **Execution of the MOA should be evidenced in the FEIS.** The executed MOA is presented in Appendix O of the FEIS.
2. **Mitigation measures presented in the Draft EIR/EIS should be included in the MOA.** Some of the mitigation measures presented in the Draft EIR/EIS have been included in the executed MOA, as well as new ones, and in the Mitigation monitoring and Reporting Program.

Comment Letter #24



ARNOLD SCHWARZENEGGER
GOVERNOR

August 18, 2009

Wally Stokes
City of Los Angeles Department of Public Works
221 N. Figueroa, Suite 350
Los Angeles, CA 90014-1914

Subject: 6th Street Viaduct Improvement Project
SCH#: 2007081005

Dear Wally Stokes:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on August 15, 2009, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

fn: Scott Morgan
Acting Director, State Clearinghouse



CYNTHIA BRYANT
DIRECTOR

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2007081005
Project Title 6th Street Viaduct Improvement Project
Lead Agency Los Angeles, City of

Type EIR Draft EIR
Description NOTE: Review Per Lead

The City of Los Angeles, in cooperation with Caltrans, is proposing to make improvements to the 6th Street Viaduct to improve this critical Los Angeles River crossing to an acceptable standard during a seismic event by either retrofitting the existing structure or replacing it entirely. The 3,500 ft long 6th Street Viaduct was built in 1932. Over the past 75 years, the concrete elements of the viaduct have been degraded by an ongoing chemical reaction, known as Alkali Silica Reaction, which has led to significant deterioration of the structure and loss of its seismic integrity, despite continuing efforts to arrest or limit its effect.

Lead Agency Contact

Name Wally Stokes
Agency City of Los Angeles Department of Public Works
Phone (213) 202-5580 **Fax**
email
Address 221 N. Figueroa, Suite 350
City Los Angeles **State** CA **Zip** 90014-1914

Project Location

County Los Angeles
City Los Angeles, City of
Region
Lat / Long
Cross Streets Mill St and east of southbound I-5
Parcel No.
Township 1S **Range** 13W **Section** 34 **Base** SBB&M

Proximity to:

Highways 101, I-5
Airports No
Railways BN&SF, UPRR
Waterways Los Angeles River
Schools SotoStES, BishopMoraSalesian, MetropolitanHS, ParaLosNinosChater
Land Use PLU: developed, heavy-light industrial
 Z: heavy industrial, public facilities, light industrial
 GP: heavy industrial, public facilities, light industrial

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Wildlife; Growth Inducing; Toxic/Hazardous; Traffic/Circulation; Vegetation; Flood Plain/Flooding; Geologic/Seismic; Landuse; Cumulative Effects; Noise; Economics/Jobs; Water Quality; Solid Waste; Public Services

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Caltrans, District 7; Integrated Waste Management Board; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; Other Agency(ies)

Date Received 06/12/2009 **Start of Review** 06/12/2009 **End of Review** 08/15/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.

Appendix M Written Comments and Responses on DEIR/EIS

Response to Comment Letter No. 24 – Governor’s Office of Planning and Research

No comments from state agencies were received. Information is acknowledged.

Comment Letter #25

GABRIELEÑO BAND OF MISSION INDIANS
A HISTORIC & PREHISTORIC TONGVA INDIAN TRIBE
NATIVES OF CALIFORNIA FOR OVER 6,000 YEARS

October 30, 2009

Mr. Carlos Montez, Senior Environmental Planner *CM*
Caltrans District 7
100 S. Main Street
Los Angeles, CA 90012
Tel: (213) 897-3818
Fax: (213) 897-0685

Re: Environmental Impact Report/NA Monitoring
6th Street Viaduct Seismic Improvement Project

Dear Mr. Montez;

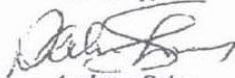
This letter is in response to the Environmental Impact Report for above referenced project. Due to the fact that the proposed project is within the traditional tribal territory of the Gabrieleño Band of Mission Indians it is my responsibility to inform you of our concern for the identification, protection and proper disposition of our cultural resources.

Since the EIR report states the potential impact to archaeological resources, paleontological resources and human remains it is our recommendation that a Native American monitor be on site at all times during any excavation or ground disturbances. The monitoring service shall be provided through our tribal office.

I can be reached at 626-926-4131 or by email at Gabrielenoindians@yahoo.com should you have any questions or comments regarding this matter; please do not hesitate in contacting our office.

I look forward to assisting all parties with the preservation of our cultural resources.

Sincerely,



Andrew Salas
Chairman

AS

Gabrielenoindians@yahoo.com

P.O. Box 393 Covina, Ca 91723

(323) 335-8798

p.1
p.2

21368880181

Gabrieleño Indians

30 09 02:31p

Response to Comment Letter No. 25 – Gabrieleno Band of Mission Indians

Native American monitor should be on site during excavation activity. Comment is noted and the City will provide the monitor during excavation.



Community Redevelopment Agency
of the CITY OF LOS ANGELES

Comment Letter #26

Eastside Regional Office

DATE / JUL 29 2010

FILE CODE / EA 9790

1916 East First Street
Los Angeles California 90033

T 323 307 8300 • F 323 265 1174
www.crala.org

July 28, 2010

To Whom It May Concern:

Portions of the 6th Street Viaduct project are located within the Amended Adelante Eastside Redevelopment Project Area (Project Area) of the Community Redevelopment Agency of the City of Los Angeles (CRA/LA). The CRA/LA wishes to express concerns regarding a possible orientation change in the bridge in addition to comments submitted on June 4, 2008. A Project Area Historic Survey (Historic Survey) was finalized on July 22, 2010. Included in the Historic Survey is an industrial district that is located along the 500 and 600 blocks of Anderson Street (Historic District). It appears that the 6th Street Viaduct project being considered may have substantial impacts to this Historic District.

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It has come to the attention of CRA/LA Staff that any change in the orientation of the bridge from the bridge's existing orientation would result in the partial, if not total, destruction of this Historic District. This would cause a substantial adverse change in the significance of a historic resource as defined by the State CEQA guidelines, thus, resulting in a significant environmental impact.

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Further, potential destruction of the Historic District is contrary to the Project Area Redevelopment Plan goals and objectives. This conflict with the regulation of an agency with jurisdiction over the area would also create a potentially significant environmental impact.

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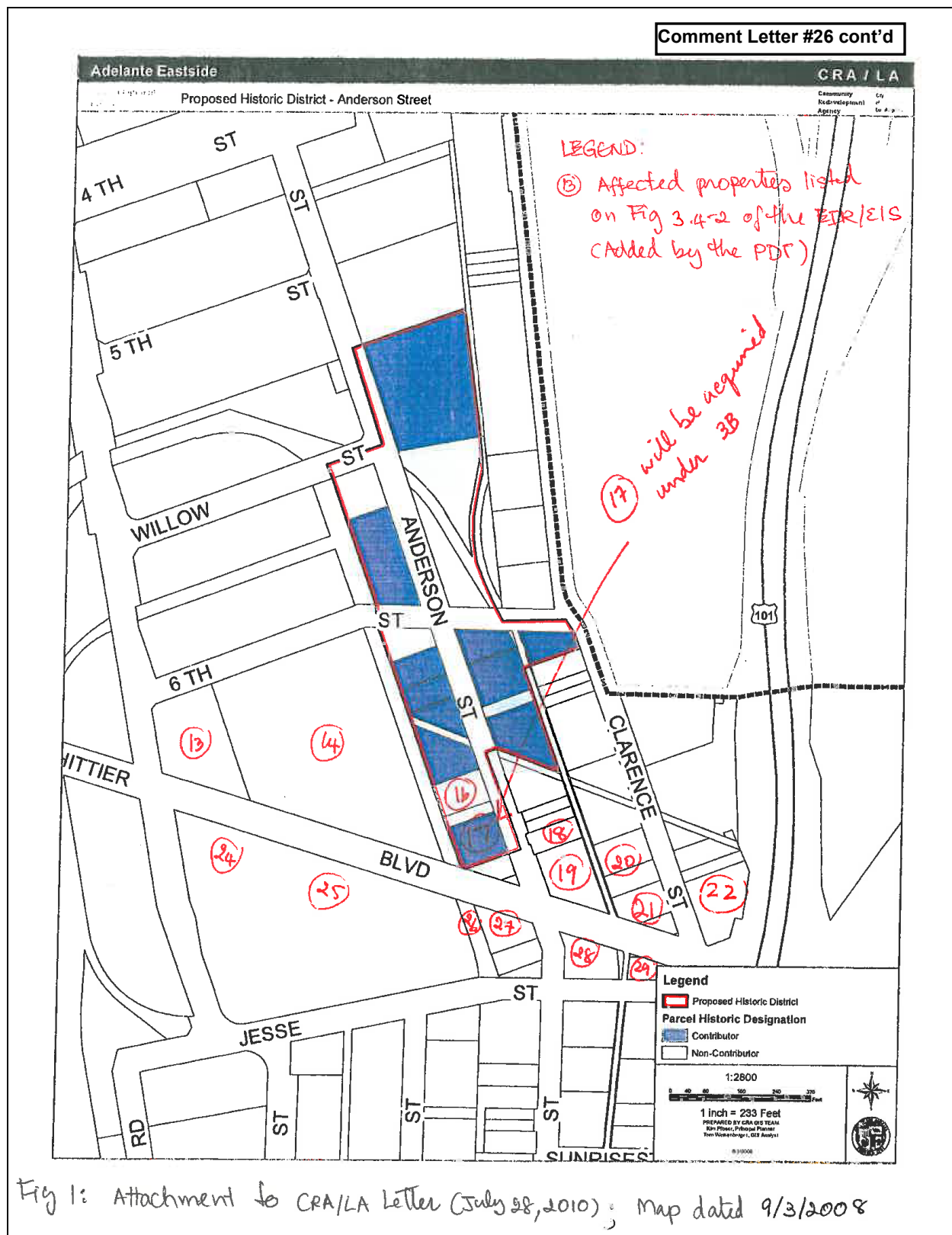
Both the Cultural Resources and Land Use and Planning potentially significant impacts that are now being brought to your attention in relation to the Historic District must be included in your analysis in order for the full environmental impact of the 6th Street Viaduct project to be considered. I am available to answer any questions regarding this matter.

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Sincerely,

Julia Stewart

CRA/LA City Planner



Comment Letter #26 cont'd



Fig 2: Map excerpted from Intensive Historic Resources Survey Report, Oct 2008

Response to Comment Letter No. 26 – Additional Comment from CRA/LA Dated July 28, 2010

1 CRA/LA finalized the Adelante Eastside Redevelopment Area Historic Survey on July 22, 2010. Included in the Historic Survey is the Anderson Street Historic District. It appears that the 6th Street Viaduct Project may have substantial impacts to the Anderson Historic District

The letter from the CRA/LA indicated that the historic survey of the Adelante Eastside Redevelopment Area was finalized on July 22, 2010. A map of the proposed “Historic District – Anderson Street (dated September 2008)” attached to the CRA/LA letter shows one building on the potentially affected property list of the 6th Street Viaduct Seismic Improvement Project (proposed project) being classified as “contributor” to the proposed Anderson District (Building No. 17 in Figure 1). This building was determined to be not eligible for the National Register of Historic Places (NRHP) by Caltrans based on the 2007 Historic Resources Evaluation Report (HRER) prepared for proposed project as part of the Section 106 consultation process.

In response to the CRA/LA request, the Project Development Team (PDT) contacted CRA/LA staff to obtain detailed information about the survey and any planned local nomination/certification process for the proposed district. The CRA/LA provided a copy of a section of the report entitled “Intensive Historic Resources Survey, Adelante Eastside Redevelopment Area, July 2008” in January 2011. Per the City’s request, the CRA/LA later provide a copy of the full report in May 2011.

The text of the report indicated the two buildings within the proposed project potentially affected property list (14 and 17) are in the proposed Anderson District. The Potential District map in Attachment D of the report, (see Figure 2) shows these two buildings as individually eligible, not as district contributors. The report does not include any Department of Parks and Recreation (DPR) forms for these two buildings that can be used as a basis to conclude that they are individually eligible. Further, the report does not include the DPR form that documents the potential district. However, the DPR form was sent to the PDT with the partial report in January 2011; it showed only the district evaluation, not individual buildings. Based on the cultural resource records search conducted by the PDT in February 2011, none of the properties referenced in the “Intensive Historic Resources Survey, Adelante Eastside Redevelopment Area, July 2008” were filed with the Information Center. Based on review of the available documents associated with the potential Anderson District mentioned above, there appear to be several inconsistencies and errors that require correction and finalization.

The PDT also understands that the Historic Survey report was submitted to Survey L.A. for inclusion in Phase 3, which will not begin until next year. Ms, Janet Hanson of Survey L. A. stated that she had reviewed the draft report and had noted errors and discrepancies to be corrected, but had not received any update as of May 2011.

It is the PDT’s understanding that the historic survey was prepared as a planning tool for CRA/LA. The methodology employed looked at a large number of properties at a reconnaissance level and made recommendations based on broad patterns of significance. The intent and use of a planning tool is to provide planners with an indication as to the potential presence or absence of potentially significant historic properties. However, this

document does not provide sufficient data to make a determination of significance for the NRHP for the purposes of Section 106 of the National Historic Preservation Act (NHPA) or for CEQA.

CEQA states that a property is presumed to be historically significant unless a preponderance of evidence demonstrates otherwise. In the case of the 6th Street Viaduct Project, the properties that have the potential to be affected by the proposed undertaking were identified and evaluated at an intensive level (research and evaluation on individual buildings as opposed to looking at large bodies of buildings at a cursory level). Section 106 only considers properties as “historic properties” when they meet the criteria for the NRHP. Therefore, Caltrans prepared sufficient evidence to demonstrate that the subject properties are not historic properties for the purposes of Section 106 or historical resources for the purposes of CEQA.

Based on the result of the cultural resources intensive evaluation of the proposed project under Section 106 consultation process, the City and Caltrans concluded that the proposed project would not result in substantial impact to other historic resources in addition to the 6th Street Viaduct itself, which has been evaluated and documented in this EIR/EIS.

2. **Change in the orientation of the 6th Street Viaduct from the existing orientation would result in the partial, if not all, destruction of the Historic District, which would cause a substantial adverse change in the significance of a historic resource as defined by the State CEQA guidelines, thus, resulting in a significant environmental impact.**

Please refer to response to comment #1 above.

3. **Potential destruction of the Historic District would be in conflict with the goals and objective of the Adelante Eastside Redevelopment Plan, creating a potentially significant environmental impact.**

The EIR/EIS documented that the loss of some industrial buildings within the CRA/LA project areas would be inconsistent with the goals and objectives of the two redevelopment projects administered by CRA/LA. However, based on Response #1 above, the proposed project would not create a potentially significant impact to any historic resources in addition to the 6th Street Viaduct itself; thus, it would not be in conflict with the goals and objectives of the Adelante Eastside Redevelopment Plan in this regard.

4. **Cultural Resources and Land Use and Planning potentially significant impacts in relation to the Historic District must be included in the environmental analysis.**

The Final EIR/EIS documented the potential Anderson Historic District raised by CRA/LA and the conclusion made by the City and Caltrans (see Section 3.9.2).

Appendix N
Alternative Development Process

Appendix N **Alternative Development Process**

Based on the project's purpose and need, several alternatives were developed and evaluated during the draft environmental document preparation phase. Interested agencies and the public were given opportunities to provide input and direction to the development and selection of alternatives through the public scoping process, cooperating agency coordination, citizen advisory committee meetings, and expert panel evaluation. The following subsections describe the alternative development activities that occurred during the project development phases.

1. Seismic Retrofit Alternatives Evaluation

Following the material testing of the 6th Street Viaduct in 2002, the City prepared a *Seismic Retrofit Pre-Strategy Report* summarizing its findings. In the retrofit pre-strategy phase, linear and nonlinear analyses were conducted to determine seismic demands and capacities of the as-built approach spans of the structure. Seismic deficiencies of the as-built structure were determined from the analytical results. The as-built analyses showed that the structure could collapse under the maximum credible earthquake (MCE). This is evidenced by the high displacement demand-to-capacity (D/C) ratios of the structure under such loading. The analyses also showed that some columns of the existing structure could suffer shear failure under the MCE event due to concrete degradation. A seismic vulnerability study, which was also conducted in the retrofit pre-strategy phase, showed a high probability of collapse.

Five retrofit alternatives were studied and evaluated in the *Final Seismic Retrofit Strategy Report*⁷, as described in the following paragraphs. The goal of retrofit Alternatives 1 through 4 was to seismically retrofit the existing structure to meet current public safety requirements. These retrofit alternatives accounted for the structure's material degradation, but they did not provide any measures to arrest future degradation; moreover, each of these alternatives would require future seismic retrofits. The goal of Alternative 5 would be to seismically retrofit the existing structure, taking into account future ASR deterioration of approximately 66 percent of the existing columns over a period of time (approximately 30 years); however, none of the retrofit alternatives accounted for future ASR deterioration in the footings, 33 percent of the existing columns, bent caps, superstructure diaphragms, or bridge deck. These elements, although not necessary to prevent a collapse of the viaduct, would continue to deteriorate from the ASR.

⁷ Sixth Street Viaduct Final Seismic Retrofit Strategy Report. 2004.

In addition to the five retrofit alternatives mentioned above, the Replacement with Historic Replica (Modified Retrofit) and Substructure Alternative were studied in response to suggestions from the preservationists to consider other partial preservation alternatives.

1.1 Retrofit Alternative 1: Infill Wall Construction

This retrofit alternative consists of construction of infill walls between columns at 17 bents, and construction of 6 grade beams and 2 footings. The retrofit design also includes restrainers at the West and East River Piers and concrete-filled steel pipes at the west abutment to enhance the capacity of shear keys under seismic forces. The alternative was designed by the City of Los Angeles Bureau of Engineering (LABOE) in 1995 and approved by the County of Los Angeles and Caltrans in 1998. The City requested, and subsequently received, an authorization for construction from Caltrans in 2000 in the amount of \$18.2 million. Because this alternative did not address the ASR, the City did not proceed with construction.

1.2 Retrofit Alternative 2: Infill Wall with Steel Casing Construction

This alternative is an enhancement to Retrofit Alternative 1 by adding steel casings to columns in the bents with infill shear walls, in addition to other columns at some of the bents with no infill walls. The steel casings would enhance confinement, ductility, and shear strength of the existing columns. The steel casings would also improve shear force transfer capacity between the infill walls and the deteriorated columns. The major component of Retrofit Alternative 2 proposes construction of infill shear walls at 14 bents in addition to the use of steel plates to provide encasement to 29 columns. Since ductility and displacement capacity of the retrofitted columns would be enhanced, it would be necessary to increase flexural strength of some of the bent caps to assure that plastic hinges would not form in the bent caps after retrofitting of the columns, but that plastic hinges would rather form in the columns. This is because of limited ductility capacity of the bent caps due to the lack of continuous bottom reinforcement and inadequate top reinforcement in the cap beams at locations of the columns.

The infill shear walls would reduce seismic transverse displacements in the existing structure. Under this alternative, two expansion joints in the superstructure would be closed, and new grade beams would be constructed to reduce seismic longitudinal displacements. The as-built analyses showed that stability problems may be encountered in the existing structure because of the small-size footings. Thus, new footings are also proposed to reduce displacements and enhance stability of the structure since the existing footings were, according to literature, sized to resist gravity plus 0.10g lateral loads. Also, retrofitting of the existing footings would be necessary because of degradation due to ASR.

Despite the confinement proposed under this alternative, ASR would continue. In addition, the seismic risk would still remain and would require a significant subsequent retrofit in approximately 10 years to maintain the seismic and operational safety of the structure.

1.3 Retrofit Alternative 3: Catcher Wall Construction

The objective of this retrofit design would increase seismic safety by preventing the collapse of the viaduct during an earthquake. The design would consist of constructing catcher walls at locations of all bents, except Bent 12. This bent would be excluded because of the restricted room available for construction imposed by the proximity of active railroad tracks. These catcher walls would provide a secondary support system to the viaduct to supplement the existing columns and foundations in the event of column collapse.

This alternative would increase seismic safety by preventing structural collapse, but it would not improve seismic performance of the existing structure, resulting in a high likelihood of destructive damage with few, if any, repair options available following a large seismic event. Life expectancy of the structure under this alternative would be approximately 10 years.

1.4 Retrofit Alternative 4: Concrete Casing Construction

This alternative would utilize concrete column casings to increase the ductility and stiffness of the existing structure. Retrofit Alternative 4 is similar to Retrofit Alternative 2 in that the existing columns would be encased to provide additional confinement to resist lateral dilation of the core. Retrofit Alternative 4 proposes retrofitting all columns and bent caps and construction of new foundations at bents with “Moderate-Severe” to “Severe” concrete column degradation based on results of the material sampling and testing study. No infill shear walls are proposed with this alternative since because the concrete column casings and the bent cap retrofit would increase the stiffness of the structure and consequently reduce seismic displacements. The new foundations would also be designed to reduce seismic displacements. Bent 12 would be excluded from retrofitting because of the restricted room available for retrofit construction to take place at this location.

Retrofit Alternative 4 has similar shortcomings to Retrofit Alternative 2. Design of the concrete encasement would not provide sufficient strength to withstand the high internal pressure from continuing ASR activity. Construction of the concrete encasement would take place with rigorous water and moisture control of the existing concrete to prevent trapped moisture inside the encased sections of columns. Life expectancy of the structure under this alternative would be approximately 20 years before the next major retrofit would be required.

1.5 Retrofit Alternative 5: Shear Wall, Steel Casing, and ASR Protection Construction

Retrofit Alternative 5 is similar to Alternative 2 in that columns would be retrofitted by steel casings, and infill walls would be constructed at more column and bents. Compared to Retrofit Alternative 2, Retrofit Alternative 5 proposed to encase all columns that were identified with “Moderate-Severe” to “Severe”⁸ damage ratings (refer to Figure 1-6 in Chapter 1) to reduce the possibility of further deterioration. Additionally, the steel casings would be designed to withstand the high level of internal pressure due to ASR-induced lateral dilation of the encased column. Bent 12 would be excluded from retrofitting because of the limited room available for construction of the column encasement due to the proximity of railroad tracks. Under this retrofit alternative, 76 columns would be encased, of which 26 would have 7/8-inch plates and 50 would have 5/8-inch steel plates. The exposed plates, channels, and bars would be concealed by a 6-inch layer of architectural mortar. All exterior columns with “Light” or “Moderate” damage ratings (refer to Figure 1-6 in Chapter 1) would also be encased to account for future concrete degradation due to ASR. Encasing all exterior columns would also maintain visual balance and consistency for the retrofitted structure. In addition to the above-mentioned columns, the interior columns in Bents 1, 4, and 5 would be encased to enhance their shear strengths.

Note that the steel casing and carbon and fiberglass rehabilitation schemes do not provide a solution to treat the concrete expansion problems within other concrete structural elements, including the railings, deck, girders, and foundations. It is expected that future retrofitting to maintain seismic and operational safety of the structure may not be required for at least 30 years after the retrofitting is completed.

1.6 Replacement with Historic Replica (Modified Retrofit)

This retrofit scheme was developed and evaluated in response to suggestions from the public to consider partial retrofit and partial replacement. It is essentially a replacement of the existing viaduct structure with a new structure that maintains the historic appearance of the existing 6th Street Viaduct with a reuse of some existing viaduct components for preservation purposes.

Under this scheme, the new structure would be constructed on the same footprint of the existing viaduct and retain the same vertical profile while making adjustment for current code requirements. All of the viaduct features would be replicated to the maximum extent feasible consistent with arriving at a roadway design that meets current AASHTO standards.

⁸ The damage rating was based upon visual observation of the degree of concrete cracking and deterioration during the materials testing program (see Figure 1-6 in Chapter 1).

Based on the preliminary design concept, the new replacement structure would have 7 spans on the west approach between the west abutment and the west river pier. The east approach would consist of 14 spans between the east river pier and Bent 37. Span length would vary between 80 ft and 156 ft, with an average span length of 130 ft to 140 ft. The superstructure would be constructed with cast-in-place (CIP) concrete multi-cell box girder. The box girder would have a parabolic soffit with a variable girder depth between 4.5 ft and 6.5 ft in a typical span. Depth of the box girder may reach up to 8 ft at some of the bents. The parabolic soffit of the superstructure would simulate the visual appearance of the existing structure. The bent cap overhang would be constructed with similar details to those of the existing structure. Concrete barrier rails Type T-80 would be used to replace the existing railing and sidewalk. In addition, the new deck would have a 65.5-ft curb-to-curb width in addition to 5-ft-wide sidewalks; thus, the total width of the new structure would be 75.5 ft, and the total width of the deck slab would be 77.5 ft. However, the current design standard for 10-ft-wide sidewalks would need to be approved for an exception.

The steel arches over the Los Angeles River would be preserved in the new replacement structure. The superstructure over the Los Angeles River would consist of a CIP box girder, as described above; however, the steel arches would be moved and reset on the exterior sides of the new superstructure to maintain the visual appearance of the existing viaduct. The steel arches would not participate in load-carrying capacity of the new viaduct portion over the Los Angeles River. With this scheme, the steel arches would carry only their self weight, as well as self weights of the vertical hangers and bracing members.

The new structure would be constructed with circular columns with diameters ranging from 6 ft to 7 ft. The circular columns would be covered by 6-inch-thick architectural precast concrete casings that have a similar exterior shape as that of the existing columns. The objective of the architectural concrete casing would be to maintain the visual appearance of the existing columns, and it would not carry any load of the columns. The columns and the architectural casings would be supported on pile foundations.

This replacement alternative would eliminate the ASR problem. The life expectancy of the new structure would be an estimated 75 years. This scheme would provide a wider roadway width that meets the goal of removing the structure from the FHWA Eligible Bridge List (EBL). Although the existing viaduct elements would be replicated to the extent practicable, the new structure would not have exactly the same visual appearance or historical aesthetics of the existing bridge.

1.7 Substructure Replacement

This retrofit scheme would be designed to meet current seismic demands by replacing all ASR-affected concrete in the substructure elements with new concrete. By replacing the substructure elements rather than using traditional strengthening retrofit solutions, the viaduct's aesthetics and historic nature could be preserved by utilizing architectural features similar to the existing members. Columns would be designed according to current seismic design criteria, including displacement and ductility capacity requirements⁹.

This retrofit scheme would replace all substructure elements, including piles, footings, grade beams, columns, and bent caps, to provide additional strength required to accommodate the anticipated seismic demands (see Figure 1). The design would include substructure replacement for the length of the entire structure, including the west approach spans, main spans, and east approach spans. In addition, this retrofit scheme would replace the existing substandard concrete barrier with a crash-tested Type 80 modified barrier consistent with current Caltrans specifications. The new barrier would mimic the aesthetics of the existing barrier. As part of the barrier replacement, all existing cobra-head luminaires and arms would be replaced with new fabricated ornamental lanterns and pendants replicating the original 1930s design.

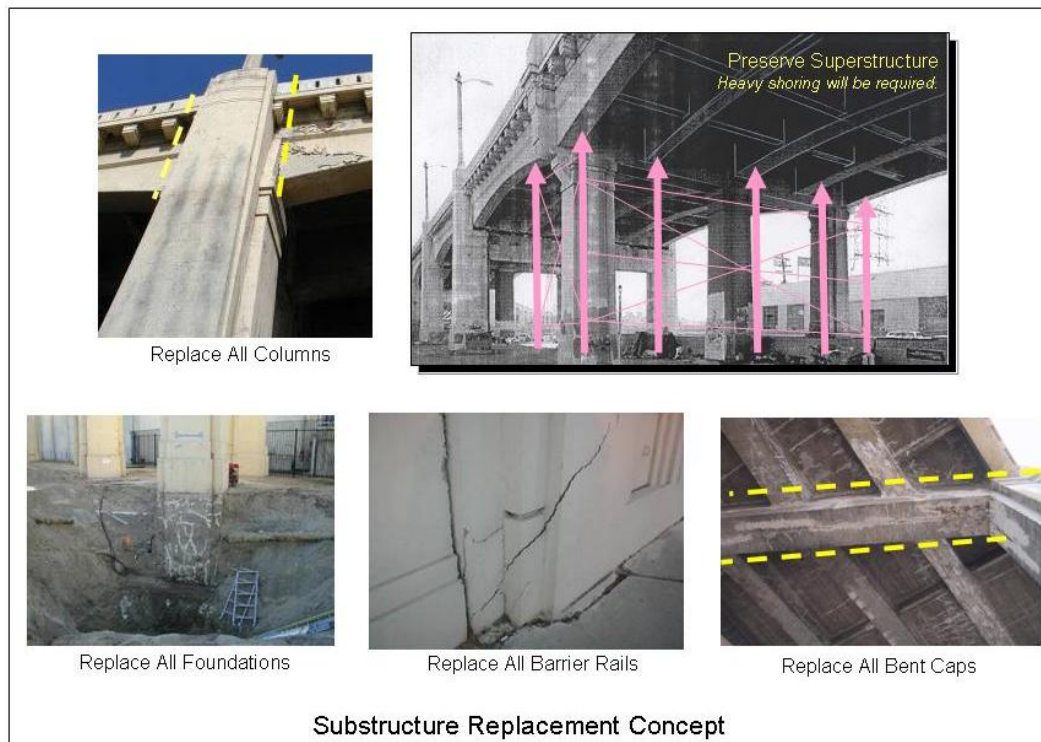


Figure 1 Substructure Replacement Concept

⁹ Retrofit Analysis Technical Memorandum for Substructure Replacement. June 2008.

The existing concrete approach spans are supported primarily on multi-column bents with spread footing foundations. Existing spread footings lack top mat reinforcement, which is required to resist seismic damage. This retrofit scheme would replace all foundations with combined pile-supported footings featuring increased footing thickness and current seismic detailing to provide the necessary strength to resist anticipated seismic demands.¹⁰ The increased strength in the foundations would provide a fixed connection to the columns, which would reduce the seismic displacement demands.

Columns would be designed to provide sufficient displacement capacity to ensure that a ductile plastic hinge forms in the column elements. Aesthetically, the retrofit design would match the geometric features of the existing concrete columns.

The piers supporting the main span have also been determined to be seismically deficient. As part of this alternative, the River Bank Piers and the Center River Pier would be replaced. The new main-span supports would attempt to aesthetically match the existing supports. Due to the size of the main-span supports, the piers would be comprised of hollow reinforced concrete elements.¹¹

As previously discussed, bent caps would be designed to provide sufficient capacity to ensure that plastic hinging is limited to the column members. A review of as-built drawings indicated that the existing bent caps lack sufficient strength to form plastic hinges in the column members; therefore, all bent caps would be removed and replaced. Existing superstructure reinforcement that is continuous through the bent cap would need to be maintained and integrated with the new bent cap reinforcement to provide the required continuity of the superstructure.

This retrofit scheme would specifically address the ASR in the substructure by removing ASR-compromised material and replacing it with new materials, but it would not address the ASR in the superstructure; therefore, the design life of the substructure would be 75 years, while the superstructure would continue to be vulnerable to earthquakes. Closure of the viaduct after a design earthquake event would likely be required due to superstructure damage.

Construction of this retrofit scheme would be difficult due to the following constraints:

- Limited access to the site from the sides and limited vertical clearances for placement of shoring
- Proximity of bridge to existing operational railroad
- Proximity of bridge to existing building foundations

¹⁰ Ibid.

¹¹ Ibid.

- Size and weight of superstructure elements to be supported during removal and replacement of substructure
- Difficult concrete removal work at the bent caps
- Questionable force transfer between the new bent caps and existing superstructure may require large-scale proof testing
- Substandard horizontal clearances between columns and railroad facilities would cause difficulty in obtaining approval from railroad companies

1.8 Lithium Treatment

In March 2007, FHWA published the report *The Use of Lithium to Prevent or Mitigate Alkali-Silica Reaction in Concrete Pavements and Structures*. Lithium treatment for the 6th Street Viaduct was thoroughly evaluated and rejected for the following reasons:

1. The FHWA report states “Lithium treatment will not repair any damage that has already occurred.” Significant ASR damage has already occurred within the 6th Street Viaduct concrete elements; thus, lithium treatment would not be effective.
2. Data from the FHWA report indicate that application of lithium to existing structures can only penetrate approximately an inch below the surface of the concrete member. The structural elements of the 6th Street Viaduct are many feet thick. The most severe ASR damage is within the core of the thick concrete members.
3. In regards to usage of lithium to treat existing ASR-affected structures, the report states “Typically, such studies have used laboratory-sized specimens with relatively small cross-sections and it has not yet been demonstrated that lithium treatment is effective with larger specimens that are more representative of elements of concrete structures.” In addition, if the large members of the viaduct could be treated, the treatment still would not correct the damages that have occurred.

1.9 Carbon Fiber Wrap Technology

Similar to steel casings, carbon and fiberglass-reinforced polymer rehabilitation schemes do not reverse or stop the ASR deterioration throughout the structural elements. The *Final Seismic Retrofit Strategy Report* did not evaluate this option in depth because of its cost being much higher relative to steel casing and its unknown long-term durability beyond approximately 20 years.

1.10 Replace ASR-Damaged Concrete within the Existing Viaduct Structure

This scheme was evaluated in response to suggestions from the public to consider preserving the general appearance of the existing viaduct by replacing the concrete elements that have deteriorated due to the ASR effect. Results of the evaluation indicated that there is no practical

method to differentiate and isolate the ASR-compromised concrete from sound material. Many of the cores, which were extracted as part of the previously discussed materials testing program, exhibited a healthy surface appearance but highly distressed interiors (see Figure 1-5); therefore, it was determined that there was no practical way to replace bad concrete with new material without replacing all of the concrete. Implementation of this scheme would essentially require replacement of the entire viaduct. Another sub-option was to replace the foundations, columns, bent caps, and guardrails, along with strengthening the existing arch ribs. The superstructure between bent caps would not be replaced. After approximately 30 years, the superstructure would have to be replaced.

Out of the 10 schemes, 8 were not carried forward for further evaluation based on the reasons summarized in Table 1.

2. Retrofit Alternative Screening

Two retrofit alternatives out of the above 10 alternatives considered including Infill Wall and Heavy Steel Casing and Substructure Replacement, were evaluated as part of the alternative screening exercise during the project development phase. As part of the screening exercise, a set of criteria was developed, as presented in Table 2. The screening results for the retrofit alternatives evaluated are summarized in Table 3.

Although the substructure replacement scheme received a slightly higher score, the Project Development Team (PDT) members chose the Infill Wall and Heavy Steel Casing scheme as the retrofit scheme to be evaluated in the environmental document because it would involve much less cost for similar results for the same design life.

**Table 1
Retrofit Alternatives Considered but Eliminated**

Retrofit Alternative	Seismic Deficiencies		Material Deficiencies			Operational Deficiencies						Historic Preservation		Traffic Management	
	Meets Minimum No Collapse Criteria	Major Damage Expected Following a Design Earthquake Event	Repairs Concrete Damaged by ASR	Prevents Future ASR Damage within Concrete	Expected Design Life	Resolves Horizontal Stopping Site Distance Deficiency	Provides a Median Barrier	Provides Wider Sidewalks	Provides Shoulders	Provides an Approved Crash-Tested Barrier Rail	Resolves Inadequate Railroad Clearances	Adverse Effect Under Section 106	Opportunity to Preserve Arch Ribs	Railroad Shoofly Required	Long Term Lane Closures on US 101
Infill wall construction	No	Yes	No	No	< 10 years	No	No	No	No	No	No	Yes	Yes	No	No
Infill walls with steel casing construction	Yes	Yes	No	No	10 years	No	No	No	No	No	No	Yes	Yes	No	No
Catcher wall construction	Yes	Yes	No	No	10 years	No	No	No	No	No	No	Yes	Yes	No	No
Concrete casing construction	Yes	Yes	No	No	20 years	No	No	No	No	No	No	Yes	Yes	No	No
Replacement with historic replica	Yes	No	Yes	Yes	75 years	No	No	No	No	Yes	Yes	Yes	Yes, but non-load carrying	Yes	Yes
Lithium treatment	No	Yes	No	No	< 10 years	No	No	No	No	No	No	Yes	Yes	No	No
Composite materials (carbon/fiberglass)	Yes	Yes	No	No	20 years	No	No	No	No	No	No	Yes	Yes	No	No
Replace concrete damaged by ASR and add reinforcing steel	Yes	Yes	Yes	unknown	75 years for replaced portion	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes

Table 2
Criteria Used for Retrofit and Alignment Alternatives Screening Exercise

Criteria	Explanation	Score Range
Meet Purpose and Need	<p>Purpose:</p> <ul style="list-style-type: none"> • Reduce vulnerability of the viaduct during a major earthquake. • Preserve 6th Street as a viable east-to-west link. • Eliminate design deficiencies of the viaduct. <p>Need:</p> <ul style="list-style-type: none"> • ASR has deteriorated the structural integrity of the concrete, making the 6th Street Viaduct vulnerable to earthquake events. • Bridge railings are damaged and cracked and do not meet crash standards. • Roadway width is substandard. 	0 to 5, with “0” assigned to the alternative that does not meet the purpose and need and “5” assigned to the alternative that fully meets the purpose and need.
Constructability	<p>Consideration was given to:</p> <ul style="list-style-type: none"> • Ease of construction. • Minimum impacts to railroads. • No impacts to transmission towers. • Need for specialized construction techniques. 	5 to 1, with “5” assigned to the alternative that would require standard construction and “1” to the alternative that would be very difficult to construct. The retrofit alternative was also given low scores taking into consideration the construction difficulties encountered when retrofitting the structure
Life Span of Facility	A new structure would have a design life span of 75 years, while the retrofitted structure would have a design life span of 30 years.	5 to 1, with “5” assigned to the alternative that has up to a 75-year life expectancy and “1” to the alternative that has a low life expectancy.
Construction Cost	<p>Consideration is given to the following costs:</p> <ul style="list-style-type: none"> • Right-of-way acquisition. • Railroad impacts. • Business relocation. 	5 to 1, with “5” assigned to the alternative with a low construction cost and “1” to the alternative with a high construction cost.
Maintenance Cost	New structure usually requires less maintenance compared to the retrofitted structure.	All replacement alternatives received a score of 5, while retrofit alternative received a lower score.
Community Disruption	Degree of businesses being disrupted due to access or displacement and the number of businesses impacted.	5 to 1, with “5” assigned to the alternative with a high number of potentially affected properties and “1” to the alternative with a low number of potentially affected properties.
Structural Safety	New structure is less vulnerable to collapse and would incorporate required safety features.	5 to 1, with “5” assigned to the alternative with all required safety features incorporated and “1” to the alternative that does not contain the required safety features.
Operational Safety	<p>Evaluation is based on consideration of the opportunity that the proposed project would:</p> <ul style="list-style-type: none"> • Eliminate sight distance restrictions. • Correct substandard lane widths and sidewalks. • Provide median buffer for opposing lane. • Replace substandard railing. 	5 to 1, with “5” assigned to the alternative that meets all required operational safety components and “1” to the alternative that does not meet the requirements.
Historic Preservation	Evaluation is based on consideration of the opportunity and/or ability to preserve historical resources of the community.	5 to 1, with “5” assigned to the alternative that would preserve the historic features and appearance of the bridge and “1” to the alternative that does otherwise.
Other Improvement Opportunities/Benefits	Evaluation is based on consideration of the opportunities to improve the surrounding area of the viaduct to benefit the community. Key issues and opportunities to be considered include, but are not limited to, design, destination, recreation, safety, and traffic.	5 to 1, with “5” assigned to the alternative that would provide open space for area improvement opportunities echoed by the public and “1” to the alternative that does not provide such opportunities.

**Table 3
Retrofit Alternative Screening Results**

Retrofit Alternative	Evaluation Criteria										Total Score	Carried Forward for Detailed Analysis
	Meet Purpose and Need	Constructability	Life Span of Facilities	Construction Cost	Maintenance Cost	Community Disruption	Structural Safety	Operational Safety	Historic Preservation	Other Improvement Opportunities		
Infill Wall and Heavy Steel Casing	2	2	2	4	2	4	2	1	3	1	23	Yes
Substructure Replacement	3	1	4	1	3	4	3	1	4	1	25	No

3. Replacement Alternatives Evaluation

3.1 Alignment Screening

A screening process was conducted to evaluate and select viable alignments for further design consideration. Based on preliminary engineering investigation and public input, the PDT initially identified more than 20 alignment scenarios for consideration. These alignment scenarios were then refined and integrated into 10 alignment alternatives (Figure 2). A workshop was conducted to screen down the proposed alignment alternatives. This workshop resulted in the alternatives being reduced to three alignments for the purpose of evaluation in the environmental document.¹⁰ Representatives from LABOE, Caltrans, and a team of engineering and planning consultants participated in the screening workshop. The evaluation criteria used in the screening exercise are summarized in Table 2. Each criterion was given an equal weight.

Table 4 summarizes the results of the alignment alternatives evaluation based on the criteria presented earlier in Table 2.

¹⁰ Alternatives considered during the workshop included the “No Action” and two “Retrofit Options.” The retrofit options were presented in Section 2.4.1 of this Draft EIR/EIS.

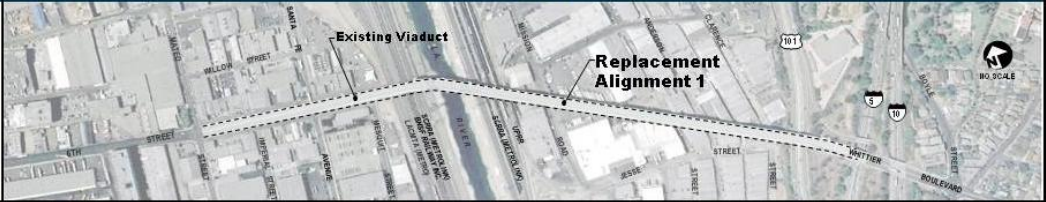
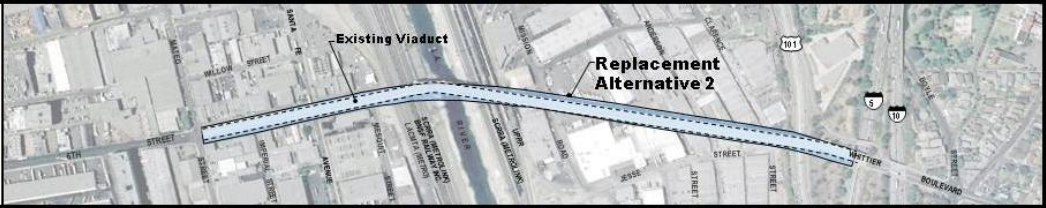
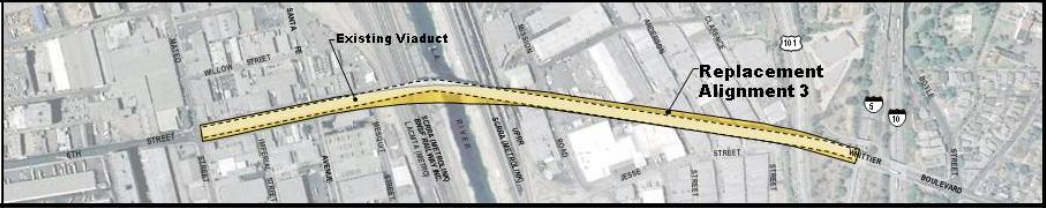
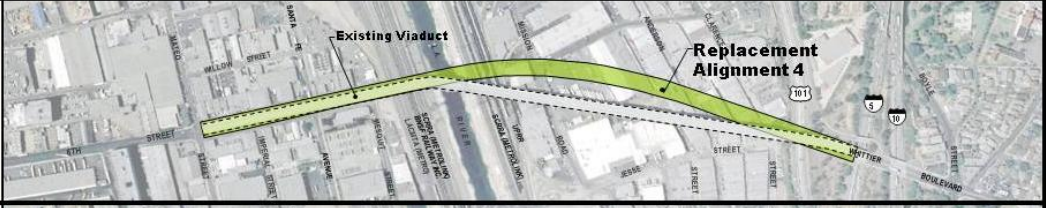
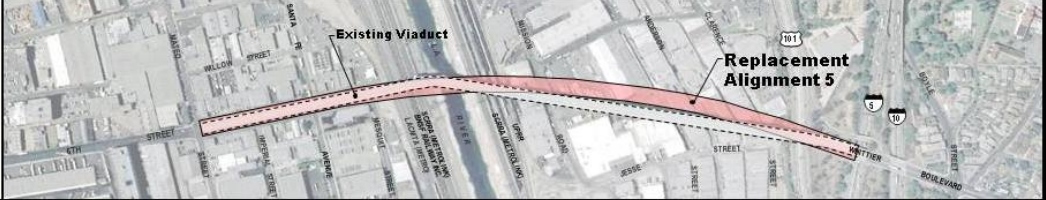
Alignment Corridor Description	Plan View
<p>Alignment 1</p> <p>Remove existing viaduct and construct a new viaduct that replicates existing viaduct on existing alignment. The new viaduct width and profile would be the same as the existing structure. No median or shoulders would be provided.</p>	
<p>Alignment 2</p> <p>Remove existing viaduct and construct a new viaduct on a new horizontal alignment. The new viaduct would be designed to have wider traffic lanes, median, shoulders, and sidewalks. To accommodate the widened viaduct, the north side of the viaduct footprint would extend to the north, while the south side of the footprint would remain at the same location except for the segment of the alignment that spans over the Los Angeles River, which would be shifted slightly south to improve the existing horizontal curve radius (2,300 ft) and provide better design speeds and stopping sight distance.</p>	
<p>Alignment 3</p> <p>Remove existing viaduct and construct a new viaduct. It would have a wider cross section as in Alternative 2. The new structure would be built along a new horizontal alignment similar to that described in Replacement Alternative 2, with the exception of a larger radius (4,000 ft) span over the Los Angeles River to allow better design speeds and sight distances and structural layout.</p>	
<p>Alignment 4</p> <p>Remove existing viaduct and construct a new viaduct. It would have a wider cross section as in Alternative 2. The new viaduct would be built on a horizontal straight line alignment for the segment from Mateo Street to the west bank of the Los Angeles River, allowing more bridge type options. The alignment under this option would swing to the north approximately 182 ft from the existing alignment, eliminating the existing radius at the east end and providing the best design speeds compared to the other alignment options under consideration.</p>	
<p>Alignment 5</p> <p>Remove existing viaduct and construct a new viaduct. It would have a wider cross section as in Alternative 2. The alignment under this option is similar to that described under Alternative 4, except that the radius (5,000 ft) east of the river is much larger, resulting in less extension of the viaduct footprint to the north. The alignment under this option would swing to the north approximately 85 ft from the existing alignment, eliminating the existing radius at the east end.</p>	

Figure 2 Replacement Alignment Alternatives – Sheet 1

Alignment Corridor Description	Plan View
<p>Alignment 6</p> <p>Remove existing viaduct and construct a new viaduct on a new horizontal alignment. It would have a wider cross section as in Alternative 2. The south side of the viaduct footprint would extend to the south, while the north side of the footprint would remain at the same location.</p>	
<p>Alignment 7</p> <p>Remove existing viaduct and construct a new viaduct on a new horizontal alignment. It would have a wider cross section as in Alternative 2. To accommodate the widened viaduct, the footprint of the viaduct would be widened on both the north and south sides.</p>	
<p>Alignment 8</p> <p>Construct a new viaduct parallel to the existing viaduct on the north side adjacent to the existing viaduct. It would have a wider cross section as in Alternative 2. Retrofit the existing viaduct for public safety.</p>	
<p>Alignment 9</p> <p>Construct a new viaduct parallel to the existing viaduct on the south side of the existing viaduct. It would have a wider cross section as in Alternative 2. Retrofit the existing viaduct for public safety.</p>	
<p>Alignment 10</p> <p>Remove existing viaduct and construct a new viaduct on a new horizontal alignment. It would have a wider cross section as in Alternative 2. To accommodate the widened viaduct, the footprint of the viaduct would be wider on the north and south sides, except for the area between Mateo Street and Mesquit Street, which would only be wider to the north. The segment that extends from the river to the east would be constructed as a cantilever structure to minimize right-of-way impacts.</p>	

Figure 2 Replacement Alignment Alternatives – Sheet 2

**Table 4
Alignments Screening Results**

Alignment	Evaluation Criteria										Total Score	Carried Forward for Detailed Analysis
	Meet Purpose and Need	Constructability	Life Span of Facilities	Construction Cost	Maintenance Cost	Community Disruption	Structural Safety	Operational Safety	Historic Preservation	Other Improvement Opportunities		
1	3	3	5	3	5	4	5	1	3	1	33	No
2	5	5	5	3	5	4	5	5	1	2	40	Yes
3	5	4	5	3	5	4	5	5	1	2	39	No
4	5	5	5	2	5	3	5	5	1	5	41	No
5	5	5	5	2	5	3	5	5	1	5	41	Yes
6	5	1	5	1	5	3	5	5	1	3	34	No
7	5	5	5	2	5	2	5	5	1	3	38	No
8	5	1	5	1	5	2	5	5	5	4	38	No
9	5	1	5	1	5	2	5	5	5	4	38	No
10	5	4	5	2	5	4	5	5	1	4	40	Yes

Based on the results of the screening analysis, alignments 2 (total score of 40), 5 (total score of 41), and 10 (total score of 40) were chosen to carry forward for analysis in the environmental document. Alignments 3, 4, and 5 were very similar, with the variation of the viaduct radius east of the river. Alignment 3 would swing the least to the north, followed by Alignments 5 and 4, respectively. Alignment 3 would be more difficult to construct than Alignments 5 and 4. In addition, Alignments 5 and 4 would provide room for other potential uses. Because Alignment 5 would result in less ROW impacts than Alignment 4, it was selected for further consideration.

3.2 Bridge Concept Alternative Screening

Screening of potential replacement bridge concepts was conducted for various beam, arch, and cable-supported bridge systems using steel and concrete materials. The purpose of this screening was to identify which bridge concepts would be developed further during the advanced planning phase of project development leading to bridge concept selection, thus narrowing the number of potential bridge concepts for staff's recommendations during the bridge concept selection phase.

The structure type screening process consisted of the following steps:

1. Develop bridge concept alternatives
2. Develop evaluation criteria
3. Obtain public input on the proposed alternatives
4. Evaluate and rank the alternatives

5. Recommend alternatives to be developed during the advanced planning phase, with five concepts moving forward for future development.

3.2.1 Bridge Concept Alternative Development

Bridge engineers and architects first developed 15 different concept plans (16, including the existing structure concept), as listed in Table 5. The concept plans depicted the alternatives with sufficient detail for the screening process. Further refinement of the selected alternatives is anticipated during the advance planning phase.

The east and west approaches to the main span were considered but were not developed to the same level of detail as the main spans. It is assumed at this stage that the approaches would be beam-type structures (concrete box girders) compatible with the architectural vocabulary of the main span.

3.2.2 Evaluation Criteria

Evaluation criteria were developed to identify the relative strengths and weaknesses of each bridge concept and help determine those most suitable for the site. Each bridge concept was assigned a value from 1 to 10 based on application of the evaluation criteria. A value of 10 was considered excellent, 7 good, 4 fair, and 1 poor. The total score for each bridge concept was then obtained by summing the individual attribute values for that concept. Construction cost was not considered as a selection factor. The evaluation criteria are described in Table 6.

Table 5
Bridge Concept Alternatives for the Main Span

Alt. No.	Description
1R	Replication of Main Span
2R	Haunched CIP prestressed concrete box girder (segmental or built on falsework)
3R	Haunched steel box girder
4R	Concrete slant leg frame
5R	Concrete deck arch
6R	Steel tied arch with top lateral bracing (3 spans of arches)
7R	Steel tied arch without top lateral bracing (1 span of arches)
8R	CIP box girder with steel tied arch pedestrian ways
9R	Steel half-through arch CIP girder approaches
10R	Concrete half-through arch with “Y” piers
11R	Extradosed concrete box girder with dual pylons
12R	Extradosed concrete box girder with single pylons
13R	Cable stay with single pylon
14R	Cable stay with 4-leg pylon
15R	Self anchored suspension

Source: 6th Street Viaduct Improvement Project Bridge Type Selection Structure Type Screening Phase, David Evans and Associates, October 2007.

Table 6
Criteria Used for Bridge Concept Evaluation

Criteria	Explanation
Seismic Performance	What is the seismic performance in terms of repairable damage after a maximum design seismic event, considering the structural system and materials? Will it be difficult to perform construction work after a seismic event, considering availability of materials and different structural elements? Considering the load redundancy of the structural system, are there multiple load paths? Are long frames resulting in minimal expansion joints and hinges possible? Are structural elements capable of sustaining large displacement/deformations while still maintaining load? Are structural elements ductile and/or compact?
Geometric Flexibility	During the design period, will changes in roadway vertical and horizontal alignments be possible without requiring a major modification to the bridge concept? Can the bridge concept accommodate curved horizontal alignments without adding significant costs? Can the bridge support system accommodate high skew angles along the railroad corridors and local streets below the structure without adding significant cost? Can the bridge supports be located to avoid conflicts with the existing access tunnel, sanitary sewer siphon, and towers for the overhead power lines?
Roadway and Pedestrian Safety	Will crash barriers be required along the sidewalks to protect structural elements such as arch ribs and cable systems? Will crash barriers be required along the median to protect structural elements such as arch ribs and cable systems? Is sight distance reduced by structural elements projecting above the roadway surface along the curved alignment?
Accessibility to Ground Level from Bridge Deck	Are piers located so access can be provided from the deck to the ground level along the river bank? Can access be provided along the span to the ground level along the river bank? How will the future access look from an aesthetics view point, blending with the existing structure?
Aesthetics	Should the bridge be a more dominant (large landmark) or more visually recessive (quiet) type structure? Does the bridge demonstrate the setting of a world-class city? Does the bridge fit into the natural and built setting? Should its architectural style include standard and accepted elements of bridge design, reflect the historic elements of the existing bridge, or should it push the current style envelope in an expression of technological, structural, and aesthetic daring? How important is the view of the bridge from below or from the deck? Should the bridge provide motorists a definite experience of a crossing? Is it appropriate for the bridge to evoke emotions of awe and wonder or community pride and signature?
Historical Compatibility	Do structural elements retain the architectural vocabulary of the historical bridge? Are similar materials being used that reflect the existing bridge's character, using state-of-the-art technology and construction methods? Does the bridge architecture invoke a renaissance of the downtown area?
Design Schedule	Will the structural system require component testing, wind studies, and indicator pile programs that will prolong the design period? Will the design period extend beyond 18 months? Will nonlinear analysis be necessary to model geometric nonlinearity and material nonlinearity?
Hydraulic Impacts	Will the pier layout and shape adversely affect the hydraulic grade within the Los Angeles River?
Environmental Impacts	Can foundation systems be constructed that minimize the need for excavation? Can foundation systems be installed that minimize noise during construction? Will the bridge design or construction cause disruption to adjacent property owners? Will the bridge scheme require additional right-of-way purchases?
Utility Impacts	Will the bridge concept require relocation of major utilities such as power transmission lines, fiber-optic lines, water line, sanitary sewer lines, and other wet and dry utilities? Can proposed or future utilities be supported within or on the superstructure?
Railroad Impacts	Will the bridge concept require foundation and bent column construction within the railroad right-of-way? Will the bridge concept minimize the time period of construction over the railroad right-of-way? Can the bridge concept provide adequate vertical clearance during construction over the railroad right-of-way? Can the bridge concept and material avoid or minimize maintenance requirements over the railroad right-of-way?
Construction Cost	Is the initial construction cost high relative to other bridge concepts? Will the structural components be manufactured locally? Does the price of material supplies fluctuate on a monthly basis? Note that the construction cost was evaluated, but it was not added to the total score for screening purpose.
Construction Schedule	Can the bridge be constructed within a 36-month period? Can the material supply be delayed by consequential causes such as labor strikes?

Table 6
Criteria Used for Bridge Concept Evaluation

Criteria	Explanation
Construction Risk	Has this concept of bridge been built before, and what were past experiences regarding claims? Are construction claims normally high for this concept of construction? Do contractors have the demonstrated skill and experience to build this concept of bridge? Is the structural system “seismically tough” during construction phases? Are construction materials readily available? Do construction material costs fluctuate over the short term?
Constructability	Is the construction scheme clear and uncomplicated? Are the details difficult to construct? Are extensive temporary supports and works or specialized equipment required for construction?
Maintenance/ Serviceability	Are components accessible for inspection? Will special equipment, such as a snooper, be required to inspect components? Can components be removed and replaced without requiring temporary support of adjacent components or the bridge? Is routine maintenance difficult or costly? Are components durable?


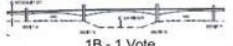

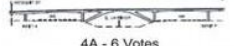







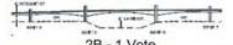









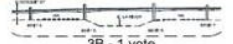







3.2.3 Public Input

On August 28, 2007, the PDT presented the preliminary sketches of 15 bridge concepts to the Community Advisory Committee (CAC), which was formed to enhance public involvement in the project development and environmental review process. During a workshop meeting, the CAC expressed their preferences for bridge concepts. Results of the votes received from the CAC members are presented in Figure 3, with the existing bridge concept or abutment to abutment replication (Through Arches Category) receiving the highest number of votes at 16 and the extradosed concrete box girder (Cable Type Category) receiving 8 votes. The bridge concepts that received the third highest votes at 6 are steel half-through arch CIP girder approaches (Through Arches Category) and concrete slant leg frame concept (Deck Arches Category).

3.2.4 Bridge Concept Evaluation

A technical screening meeting was held on September 14, 2007, and involved a panel of nine bridge experts tasked to evaluate and rank the bridge concepts and to recommend five alternatives to be further developed during the advance planning phase. In addition eight discipline leads from the team of consultants, City staff, and Caltrans staff were in observance of the screening workshop¹³. The expert panel reviewed the 15 bridge concepts and screened them down to eight, taking into consideration the preferences expressed by the CAC at their previous workshop (Figure 4). The eight concepts were further evaluated using the criteria listed in Table 6. The results of the final screening are shown in Table 7. Based on the screening results, five bridge concepts were carried forward for detailed study (Figure 5).

¹³ Bridge Type Selection Structure Type Screening Phase. October 2007.

BEAM TYPE BRIDGES	ARCH TYPE BRIDGES			CABLE TYPE BRIDGES
	DECK ARCHES	TIED ARCHES	THROUGH ARCHES	
 <p>2R</p>  <p>1B - 1 Vote</p>	 <p>4R</p>  <p>4A - 6 Votes</p>	 <p>6R</p>  <p>7A - 3 Votes</p>	 <p>1R</p>  <p>11A (This is the existing bridge) - 16 Votes</p>	 <p>11R</p>  <p>14C - 5 Votes</p>
 <p>2R</p>  <p>2B - 1 Vote</p>	 <p>5R</p>  <p>5A - 5 Votes</p>	 <p>7R</p>  <p>8A - 1 Vote</p>	 <p>9R</p>  <p>12A - 6 Votes</p>	 <p>12R</p>  <p>15C - 8 Votes</p>
 <p>3R</p>  <p>3B - 1 vote</p>	 <p>6A - 0 Votes</p>	 <p>9A - 0 Votes</p>	 <p>10R</p>  <p>13A - 0 Votes</p>	 <p>16C - 0 Votes</p>
		 <p>8R</p>  <p>10A - 5 Votes</p>		

1R Corresponding bridge name shown on Table 2-7

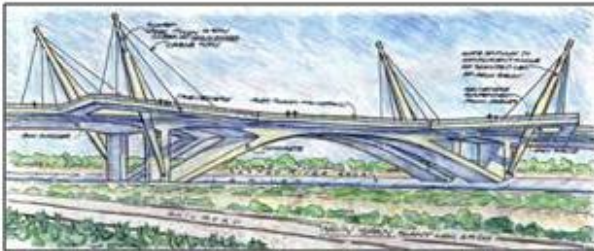
Figure 3 Results of Public Input on Preliminary Sketches of Bridge Concept Alternatives



Alternative 1R – Replication



Alternative 2R – CIP Prestressed Concrete Box Girder



Alternative 4R – Concrete Slant Leg Frame



Alternative 5R – Concrete Deck Arch



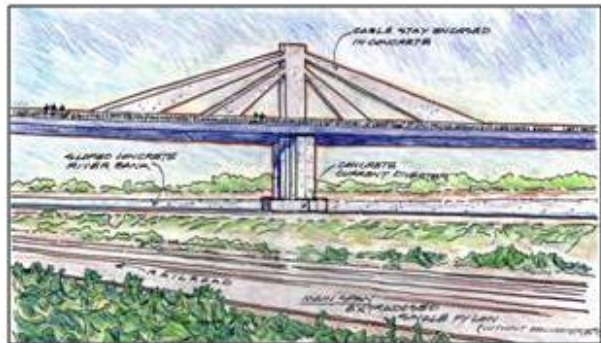
Alternative 8R – CIP Box Girder with Steel Tied Arch Pedestrian Ways



Alternative 9R – Steel Half Through Arch



Alternative 11R – Extradosed Concrete Box Girder with Dual Pylon



Alternative 12R – Extradosed Concrete Box Girder with Single Pylon

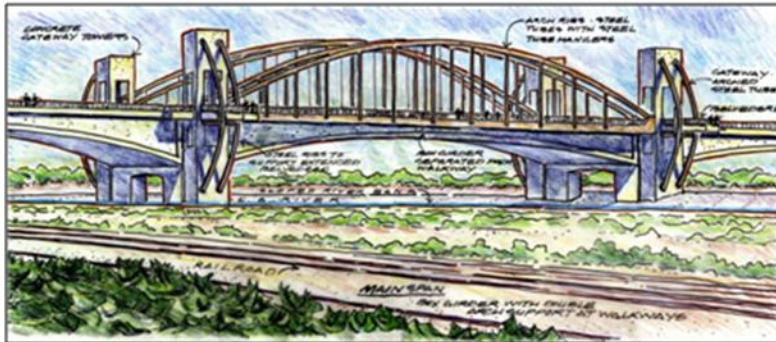
Figure 4
Preliminary Sketches of Bridge Concepts Short-listed by
Expert Panel for Evaluation

**Table 7
Bridge Concept Screening Results**

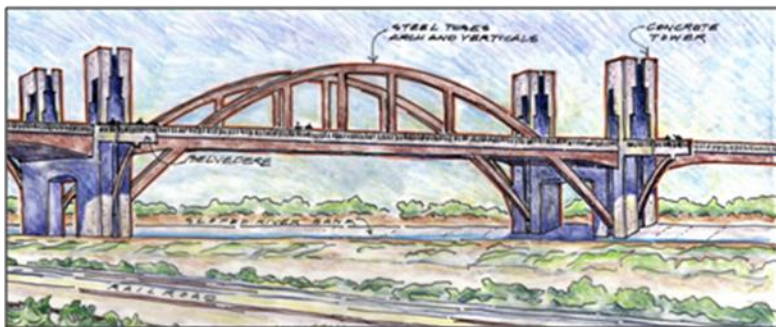
Alternative	Evaluation Criteria															Total Score	Carried Forward for Detailed Analysis	
	Seismic Performance	Geometric Flexibility	Roadway and Pedestrian Safety	Future River Access from Deck Level	Aesthetics	Historical Compatibility	Design Schedule	Hydraulic Impacts	Environmental Impacts	Utility Impacts	Railroad Impacts	Construction Cost	Construction Schedule	Construction Risk	Constructability			Maintenance/Serviceability
Weight	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1		
1R – Replication	7	4	7	7	10	10	4	6	4	7	1	4	7	10	4	4	92	Yes
2R – CIP prestressed concrete box girder	10	10	10	10	4	4	10	9	7	7	9	10	10	10	10	10	130	No
4R – Concrete slant leg frame	7	8	10	10	7	7	4	9	6	6	4	5	8	7	4	8	105	No
5R – Concrete deck arch	7	8	10	10	7	7	4	9	6	7	4	5	8	7	4	10	108	No
8R – CIP box girder with steel tied arch pedestrian ways	7	8	7	10	6	4	8	9	7	7	9	8	9	9	7	7	114	Yes
9R – Steel half-through arch CIP box girder approaches	10	4	7	10	10	7	4	9	6	7	7	6	9	6	7	6	109	Yes
11R – Extradosed concrete box girder with dual pylons	10	8	7	7	10	5	7	7	7	10	10	5	10	9	10	8	125	Yes
12 R – Extradosed concrete box girder with single pylons	10	7	4	7	10	4	7	7	7	10	10	3	10	9	9	8	119	Yes



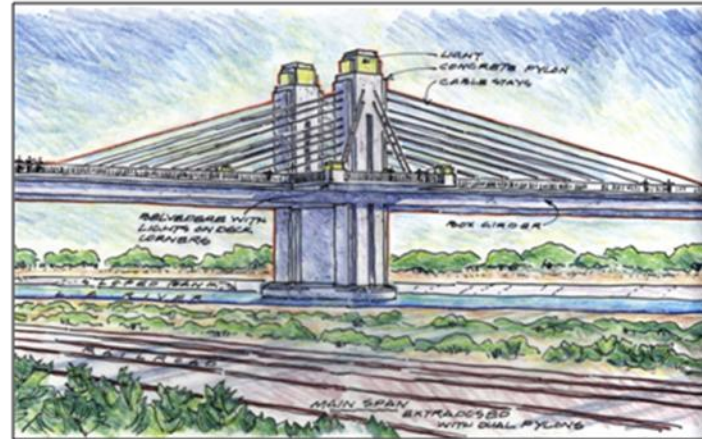
Bridge Type 1 – Replication



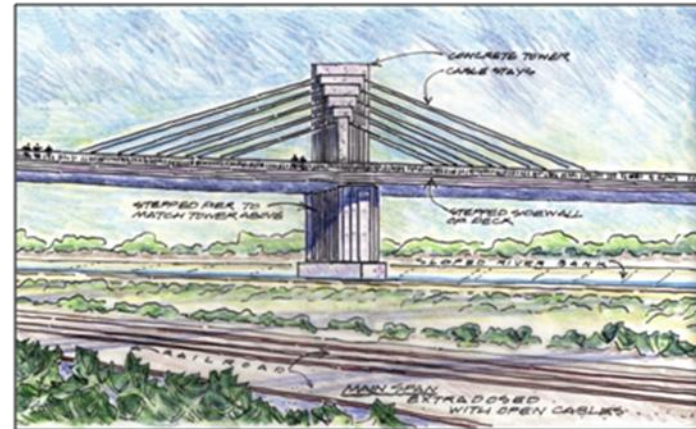
Bridge Type 2 – CIP box girder with steel tied arch pedestrian ways



Bridge Type 3 – Steel Half Through Arch with CIP box girder approaches



Bridge Type 4 – Extradosed Concrete Box Girder with Dual Pylons



Bridge Type 5 – Extradosed Concrete Box Girder with Single Pylon

Figure 5
Preliminary Sketches of bridge Concepts
Carried Forward for Detailed Study

3.3 Alternative Evaluation Workshop

Nineteen (19) members of the PDT, which includes representatives from the City of Los Angeles Bureau of Engineering's Bridge Improvement Program and Environmental Management Group, LADOT, Caltrans' Environmental Division, and a team of consultants from various disciplines, held a workshop on October 8, 2008. The purpose of the workshop was three-fold:

1. Determine the feasibility of retrofit concepts
2. Identify the highest ranked project alignment from three proposed alignments
3. Identify the highest ranked bridge concept from five design concepts

The criteria used in ranking the alternatives, roadway alignments, and bridge concepts had been developed over the previous 2-year public involvement, preliminary engineering, and environmental review phase. The project team once again reviewed results of extensive previous research to revalidate each of the evaluation criteria, including the value engineering and ASR workshop exercises conducted as part of the project development, and then scored and ranked the alignment alternatives and bridge design concepts.

3.3.1 Retrofit

At the workshop, staff reviewed the previous screening results comparing the retrofit and replacement alternatives (see Table 8) and confirmed that the three replacement alternatives carried forward have marked advantages over the retrofit schemes considered.

Although the Retrofit Alternative would have lower construction costs and is higher rated from a historic preservation point of view, staff reached a consensus that the Retrofit Alternative is not the recommended alternative because of the following reasons:

- There are no known methods to stop, reverse, or mitigate the ASR deterioration.
- The Retrofit Alternative would have the highest life-cycle cost.
- The Retrofit Alternative would not correct the geometric deficiencies of the existing viaduct.
- Retrofit Alternative construction would require reduction of the railroad horizontal clearances, which does not meet requirements of the railroad agencies.
- Because of access restrictions, column encasement at Bent 12 is infeasible.
- Retrofitting would adversely affect this historic resource.
- The Retrofit Alternative would only meet a "no collapse" standard; significant damage could occur in a design seismic event.

Based on the above reasons, the staff recommended bridge replacement over the Retrofit Alternative.

**Table 8
Retrofit and Replacement Alignments Screening Results**

Alignment	Evaluation Criteria										Total Score
	Meet Purpose and Need	Constructability	Life Span of Facilities	Construction Cost	Maintenance Cost	Community Disruption	Structural Safety	Operational Safety	Historic Preservation	Other Improvement Opportunities	
Retrofit Alternative											
Infill Wall and Heavy Steel Casing	2	2	2	4	2	4	2	1	3	1	23
Replacement Alternatives											
Alignment Alternative 2 (Alignment 3A)	5	5	5	3	5	4	5	5	1	2	40
Alignment Alternative 5 (Alignment 3B)	5	5	5	2	5	3	5	5	1	5	41
Alignment Alternative 10 (Alignment 3C)	5	4	5	2	5	4	5	5	1	4	40

3.3.2 Replacement Alignments

For the Replacement Alternative, the following criteria were used in ranking the three proposed alignments:

- Geometric design
- ROW impacts to parcels within the proposed new viaduct footprint
- ROW impacts to remaining parcels adjacent to the construction site
- Construction impacts
- Capacity to avoid LADWP transmission towers
- Impacts to utilities
- Adequate access to perform future maintenance
- Geometric capability to accommodate various bridge concepts under consideration
- Future compatibility with the Greening Concept
- Accommodating local plans
- Overall environmental impacts

Following deliberation, Alignment Alternative 2 (later renamed to Alignment B) had the highest score and ranking, followed by Alignment Alternatives 5 and 10 (later renamed to Alignments A and C (Table 8). Alignment B had the highest ranking because it met the geometric specifications required by LADOT; however, Alignment B would result in the greatest ROW

impacts. To minimize ROW impact, staff recommended that Alignment B be refined during the final design stage.

3.3.3 Replacement Bridge Concepts

Based on the results of the ranking evaluation for five bridge concepts shown on Figure 5, Bridge Concept 4 (Dual Tower Extradosed [cable supported] with CIP Box Girder Approaches) received the highest score; however, since the bridge concept does not affect the results of the environmental impact analysis, all five bridge concepts would be evaluated in the EIR/EIS as viable options for the Replacement Alternative.

In spring 2009, refinement of Bridge Concepts 1 and 4 were added as a result of public and agency input. Bridge Concepts 1A and 4A were developed for consideration during the public review period of the Draft EIR/EIS, and they were introduced at the CAC meeting in April 2009 and during the public hearings for the Draft EIR/EIS held in July 2009. Each of the six bridge concepts, including refined Concepts 1A and 4A, could be constructed on any of the viaduct replacement alignments (i.e., A, B, or C). The City will elaborate and refine the final design enhancements for the bridge replacement, as a means of ensuring that both an architecturally distinctive and cost-effective design is selected for construction.

4. Preferred Alternative Identification

The PDT held a workshop on September 29, 2009, after the close of the Draft EIR/EIS public comment period, to identify a preferred alternative based on the highest ranked replacement alignment and bridge concept. Three alignments and seven bridge design concepts were considered. Twenty (20) members of the PDT, including representatives from the City of Los Angeles Bureau of Engineering’s Bridge Improvement Program, Environmental Management Group, and Real Estate Division; LADOT; Caltrans’ Environmental Division and Caltrans Engineering Services Division; and a team of consultants from various disciplines, participated in the workshop. In addition, the City Engineer and representatives from City of Los Angeles and City Administrative Officer (CAO) observed the workshop. Greg Kolle from FHWA participated over the phone. The names, affiliations, and areas of expertise of the participants are presented in Table 9.

**Table 9
Preferred Alternative Evaluation Workshop Participants**

Name	Affiliation	Area of Expertise
Steve Thoman, P.E., S.E.	Consultant	Bridge Engineer
John Koo, P.E., S.E.	City of Los Angeles BOE	Bridge/Structural Engineer
Yoga Chandran, Ph.D., P.E., G.E.	Consultant	Geotechnical Engineer
Donald McDonald, FAIA	Consultant	Bridge Architect

**Table 9
Preferred Alternative Evaluation Workshop Participants**

Name	Affiliation	Area of Expertise
Suhash Patel, P.E.	Consultant	Civil/Structural Engineer
Kent Cordtz, P.E., S.E.	Consultant	Bridge Engineer
Jim Wu, P.E, S.E.	City of Los Angeles BOE	Bridge/Structural Engineer
Jeffery Bingham	Consultant	Environmental Planner
Linda Moore	City of Los Angeles BOE	Environmental Planner
David Lewis	Caltrans	Environmental Planner
Scott Straub, P.E.	Caltrans	Bridge/Structural Engineer
Bearj Sarkis, Ph.D., P.E, T.E. PTOE	City of Los Angeles DOT	Transportation Engineer
Nick Schilling, P.E.	Consultant	Roadway Engineer
Jim Wright	Caltrans	ROW Agent
Anne Kochaon, QEP	Consultant	Environmental Planner
Uri Jimenez	City of Los Angeles BOE, Real Estate Division	Property Manager
Wally Stokes	Consultant	Environmental Planner
Shafi Sharifan, Ph.D., P.E.	Consultant	Bridge Engineer
Carlos Montes	Caltrans	Environmental Planner
Phil Richardson, P.E.	City of Los Angeles BOE	Civil/Bridge Engineer
Walt Quesada, P.E.	Consultant	Roadway Engineer
Greg Kolle, P.E.	Federal Highway Administration	Bridge Engineer

The criteria used in ranking the alternative roadway alignments and bridge concepts during the Draft EIR/EIS preparation were updated to include additional criteria suggested by the PDT and based on public and agency comments received during circulation of the Draft EIR/EIS. Each bridge concept and alignment under consideration was assigned a value from 1 to 10 based on the application of the evaluation criteria. A total score for each alternative was obtained, based on equal weighting of each criterion. Criteria and scoring used in ranking the alternatives are as follows:

Score	Rating	Expectation Level Compared to Baseline Criteria	Analogical Example
10	Excellent	Exceeds expectations	Superior to established baseline Bridge Concept (2) or Alignment (3B)
8	Good	Above expectations	Better compared to established baseline Bridge Concept or Alignment
5	Acceptable	Meets expectations	Equal to established baseline Bridge Concept or Alignment
3	Fair	Below expectations	Worse than established baseline Bridge Concept or Alignment
1	Poor	Does not meet expectations	Inferior to established baseline Bridge Concept or Alignment

4.1 Bridge Structure Evaluation

Table 10 summarizes the criteria used in ranking the seven bridge concepts. These criteria were developed to also consider compatibility with the community plans and public input. The PDT scoring results, by total score applying equal weighting factors, are shown in Table 11. Bridge Concept 4A (Extradosed Concrete Box Girder with Three Dual Pylons) received the highest score, with Bridge Concept 2 (Cast-In-Place Box Girder with Steel Arch Pedestrian Ways) being second highest with only one point difference. Bridge Concepts 1A and 1 (Replication from Abutment to Abutment and Main Span Replication) received the lowest scores by the PDT members. The PDT also ranked alternatives based on the number of criteria with highest scores (Table 11). Based on this consideration, Bridge Concept 2 received the highest score in 10 out of 18 criteria considered. Bridge Concepts 4A and 5 were second, receiving the highest scores in 7 out of 18 criteria considered. Bridge Concepts 1 and 1A are at the bottom of the list, receiving the highest scores in 2 and 1 out of 18 criteria considered, respectively.

Based on the results of the evaluation presented above, Bridge Concept 4A was identified as the consensus preferred alternative.

Table 10
Criteria Used for Bridge Concept Selection

Criteria	Explanation
Seismic Performance	What is the seismic performance in terms of repairable damage after a maximum design seismic event, considering the structural system and materials? Will it be difficult to perform construction work after a seismic event, considering availability of materials and different structural elements? Considering the load redundancy of the structural system, are there multiple load paths? Are long frames resulting in minimal expansion joints and hinges possible? Are structural elements capable of sustaining large displacement/deformations while still maintaining load? Are structural elements ductile and/or compact?
Geometric Flexibility	During the design period, will changes in roadway vertical and horizontal alignments be possible without requiring a major modification to the bridge concept? Can the bridge concept accommodate curved horizontal alignments without adding significant costs? Can the bridge support system accommodate high skews along the railroad corridors and local streets below the structure without adding significant cost? Can the bridge supports be located to avoid conflicts with the existing access tunnel, sanitary sewer siphon, and towers for the overhead power lines? Is steel framing and/or reinforcing of structural members difficult with skewed and curved alignments? Can support cables be constructed along a skew and or curve, and does the cable interfere with driver sight distance?
Roadway and Pedestrian Safety	All concepts use a raised sidewalk (standard). Will crash barriers be required along the sidewalks to protect structural elements such as arch ribs and cable systems? Will crash barriers be required along the median to protect structural elements such as arch ribs and cable systems? Is sight distance reduced by structural elements projecting above the roadway surface along the curved alignment?
Accessibility to Ground Level from Bridge Deck	Will vertical access be precluded from the bridge deck to the ground below? Are piers located so access can be provided from the deck to the ground level along the river bank? Are belvederes provided at the top of the river bank to act as a future landing? Can access be provided along the span to the ground level along the river bank? How will the future access look from an aesthetics view point, blending with the existing structure?
Historical Compatibility	Do structural elements retain the architectural vocabulary of the historical bridge? Does the concept have the same look as the existing bridge? Are similar materials being used that reflect the existing bridge's character?
Public Support	Based upon written comments or public testimony at public hearings, which bridge concepts received support?

Table 10
Criteria Used for Bridge Concept Selection

Criteria	Explanation
Iconic Value (visually unique)	Will the bridge be a signature design? Will the bridge be of “post card” quality, representing the City of Los Angeles? Does the bridge architecture invoke a renaissance of the downtown area? Is the bridge visually unique? Will the bridge evoke public interest and community pride?
Impacts to Local Traffic During Construction	Impacts to local traffic during construction will result from foundation and column construction adjacent to local roads and sidewalks, and from narrow falsework openings across roadways and sidewalks. Does the bridge layout avoid foundation construction adjacent to roadways and sidewalks? Can longer falsework be used to span beyond roadways and sidewalks to reduce impacts to traffic?
Hydraulic Impacts to River	Does the bridge completely span the river and its banks? Are piers located at the top of the river banks? Are piers located in the middle section of the river? Are pier shapes within the river designed to maintain (or reduce) the existing hydraulic grade? Will the pier layout and shape adversely affect the hydraulic grade within the Los Angeles River?
Environmental Impacts (water quality/aquatic)	Does the bridge completely span the river and its banks? Can foundation systems be constructed that minimize the need for excavation within the waterway?
Compatibility with Los Angeles River Revitalization Master Plan (LARRMP)	Are longer and fewer spans being used for the layout, providing greater opportunity for greening (open space) below the viaduct? Are piers being located away from the top of the river bank and railroad corridors?
Utility Impacts	Will the bridge concept require relocation of major utilities such as power transmission lines, fiber-optic lines, water line, sanitary sewer lines, and other wet and dry utilities? Can proposed or future utilities be supported within or on the superstructure?
Potential Impacts to California High Speed Rail	Are proposed piers/columns in conflict with the planned High Speed Rail tracks? Are piers/columns adjacent to the High Speed Rail tracks that might interfere with train operations?
Railroad Impacts	Will the bridge concept require foundation and bent column construction within the railroad ROW? Will the bridge concept minimize the time period of construction over the railroad ROW? Will additional railroad ROW or track realignment be necessary? Can the bridge concept provide adequate vertical clearance during construction over the railroad ROW? Can the bridge concept and material avoid or minimize maintenance requirements over the railroad ROW?
Construction Schedule	What is the period of construction for the bridge? Can the material supply be delayed by consequential causes such as labor strikes? Does the bridge construction method have risks that will potentially delay construction?
Construction Cost and Constructability	Is the initial construction cost high relative to other bridge concepts? Will the structural components be manufactured locally? Does the price of material supplies fluctuate on a quarterly basis? Is the construction scheme clear and uncomplicated? Are the details difficult to construct? Are extensive temporary supports and works or specialized equipment required for construction?
Maintenance/ Serviceability	Will painting be required? Will cables/sockets or steel members require special inspection? Are components accessible for inspection? Will special equipment, such as a snooper, be required to inspect components? Can components be removed and replaced without requiring temporary support of adjacent components or the bridge? Is routine maintenance difficult or costly? Are components durable?

**Table 11
Bridge Structure Ranking Results**

	Seismic Performance	Geometric Flexibility	Roadway and Pedestrian Safety	Future River Access from Deck Level	Historical Compatibility	Public Support	Iconic Value	Impacts to Local Traffic During Construction	Hydraulic Impacts to the River	Environmental Impacts (water quality/aquatic)	Future Greening Opportunities	Utility Impacts	Potential Impacts to Future High Speed Rail Project	Railroad Impacts	ROW Impact to Properties	Construction Schedule	Cost & Constructability	Maintenance/Serviceability	Score	Rank
Ranked by Total Score																				
Weight	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Concept 1	5	5	6	7	7	6	6	6	4	5	6	6	7	6	5	5	6	5	103	6
Concept 1A	4	5	6	7	9	9	6	3	4	5	3	4	3	3	3	4	2	4	84	7
Concept 2	6	8	7	9	6	6	6	6	6	6	6	6	7	6	5	7	8	6	117	2
Concept 3	5	5	6	9	6	6	6	6	6	6	6	6	7	6	5	6	7	5	109	5
Concept 4	5	7	6	4	5	7	7	6	5	5	7	6	8	9	5	6	8	6	112	3
Concept 4A	6	7	7	4	5	8	9	7	5	5	8	7	8	9	5	6	7	5	118	1
Concept 5	6	6	5	4	4	6	8	8	5	5	9	7	8	9	5	6	4	5	110	4
Ranked by Number of Highest Scoring Criteria																				
Weight	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	# of Highest Scores	
Concept 1	5	5	6	7	7	6	6	6	4	5	6	6	7	6	5	5	6	5	1	7
Concept 1A	4	5	6	7	9	9	6	3	4	5	3	4	3	3	3	4	2	4	2	6
Concept 2	6	8	7	9	6	6	6	6	6	6	6	6	7	6	5	7	8	6	10	1
Concept 3	5	5	6	9	6	6	6	6	6	6	6	6	7	6	5	6	7	5	4	5
Concept 4	5	7	6	4	5	7	7	6	5	5	7	6	8	9	5	6	8	6	5	4
Concept 4A	6	7	7	4	5	8	9	7	5	5	8	7	8	9	5	6	7	5	7	2
Concept 5	6	6	5	4	4	6	8	8	5	5	9	7	8	9	5	6	4	5	7	2

4.2 Alignment Alternative Evaluation

The criteria used in ranking the three alignment are summarized in Table 12. Based on the scoring results shown in Table 13, Alignment 3B received the highest score and Alignment 3C received the lowest score.

Table 12
Alignment Evaluation Criteria

Criteria	Explanation	Score Range
Operational Safety	<p>Consideration is given to the following:</p> <ul style="list-style-type: none"> • Will the alignment improve the horizontal alignment by increasing the radius of the existing alignment over the river and US101? • Will the alignment comply with current standards? • Will the alignment provide a median to act as a buffer for opposing traffic? 	Scoring range was from 1 to 10, with “5” given to the alignment that is acceptable and “8” to the one that is above expectations. Alignment 3B has the largest radius over the river and eliminates the “kink” over US 101. Alignment 3B received the highest score of “8” because it provides better geometry, followed by 3A, and 3C.
Accessibility to Ground Level from Bridge Deck	<p>Consideration is given to the following:</p> <ul style="list-style-type: none"> • Will the alignment make provisions for access to the river? • Will the alignment be compatible with the Los Angeles River Revitalization Master Plan 	All of the proposed alignments equally meet the criterion. Each of the alignments was ranked “6” for meeting the criterion.
Impacts to Local Traffic during Construction	Will the alignment take into account commuter traffic traveling on 6 th Street across the viaduct, as well as traffic adjacent to or in the vicinity of the bridge?	Scoring range was from 1 to 10, with the highest score given to the alignment that results in the least traffic impacts to adjacent businesses and provides opportunities for temporary parking. All of the alternatives were similar in terms of impacts to traffic across the viaduct. Alignment 3B received the highest score of “8” because the alignment swings to the north and provides additional work and access area once the existing bridge is removed. Alignment 3C had the lowest score of “4” because it impacts businesses on both sides of the existing bridge, plus it does not provide additional open space that can be used by the contractor or adjacent businesses.
Hydraulic Impacts during Construction	Consideration is given to the effect of each alignment on the river hydraulics.	None of the proposed alignments affect the river hydraulics; therefore, they all received the same ranking of “6” for meeting the criteria.
Environmental Impacts	Consideration is given to the impacts to the following environmental resources: water quality and habitat, community impacts such as environmental justice and business disruptions, visual/aesthetics, land use (industrial and planning), cultural resources, hazardous waste, air quality, and noise.	Scoring range was from 1 to 10, with the highest score given to the alignment that has the least impacts to land use and community impacts because the other factors are relatively similar among all of the alignments. Alignment 3A received the highest score of “7” because it had the least impacts to land use and businesses, followed by 3B at “6” and 3C at “4.”
Compatibility with LARRMP	<p>Consideration is given to the following:</p> <ul style="list-style-type: none"> • How well does the design allow for greening by creating open spaces? • How well does the alignment allow for 6th Street becoming a destination? 	Scoring range was from 1 to 10, with the highest score given to the alignment that creates more open space. Alignment 3B received the highest score of “8” because it allows for most of the existing bridge footprint to become open space that can be used for future greening and/or redevelopment. Alignment 3C was ranked the lowest at “3” because it does not create open space.
Utility Impacts	Consideration is given to the impacts to	Scoring range was from 1 to 10, with the highest score given

**Table 12
Alignment Evaluation Criteria**

Criteria	Explanation	Score Range
	major utilities such as the U.S. Army Corps of Engineers tunnel, Department of Water and Power (DWP) transmission lines, sewer siphon, and other utilities.	to the alignments that minimize impacts to utilities. All of the proposed alignments avoid all major utilities. Alignment 3C received the lowest score of “5,” in comparison to a “6” for the other alignments. All of the alignments meet DWP’s clearance requirement, except for Alignment 3C, which meets the bare minimum.
Railroad Impacts	Consideration is given to the following: <ul style="list-style-type: none"> • Will the alignment maintain existing vertical clearance? • Will the alignment be compatible with the high speed rail project? • Will the alignment minimize aerial easements? • Will the alignment reduce operational impacts? 	Scoring range was from 1 to 10, with the highest score given to the alignment that minimizes aerial easements. All of the other criteria are the same for all of the proposed alignments. It is assumed that the City will own the easement over the railroad for the existing bridge footprint. Any portions outside this footprint will have to be acquired by the City. Under this scenario, Alignment 3C will require the least amount of additional aerial easement; therefore, it was scored highest at “7,” the other alignments were given a “6.”
ROW Impacts to Properties	Consideration is given to the following: <ul style="list-style-type: none"> • Will the alignment minimize impacts to businesses? • Will the alignment minimize impacts to properties? 	Scoring range was from 1 to 10, with the highest score given to the alignment that has the lowest ROW costs/impacts. Alignments 3A was scored the highest at “7” based on the lowest ROW cost/impact. Alignment 3B had the highest ROW cost/impact, receiving a score of “4.” Alignment 3C also received a low score of “4” because of the risks involved during construction and because it impacted the largest number of parcels.
Construction Schedule	Two scheduling scenarios were considered: <ul style="list-style-type: none"> • Combined demolition and construction. • Two separate contracts: demolition and construction. 	Scoring range was from 1 to 10, with the highest score given to the alignments that have the shortest construction schedule under both scenarios. Alignments 3A and 3B scored the highest at “6” because the total construction duration was very similar under both scenarios. Alignment 3C scored a “4” because of the longer construction time frames under both scenarios. This is due to the proximity of the buildings on the south side of the bridge and east of the river.
Construction Cost and Constructability	This category considers construction costs and constructability of each alignment.	Scoring range was from 1 to 10, with the highest score given to the alignment that is easier to construct because all four proposed alignments have similar costs. Alignment 3C scored the lowest at “5” because of the risks involved with working in close proximity to the buildings on the south side of the alignment east of the river. The other alignments scored a “7.”
Maintenance	This category considers if the alignment provides adequate space, preferably 15 feet, for maintenance on both sides of the bridge.	Scoring range was from 1 to 10, with the highest score given to the alignment that provides the most space to perform maintenance operations. Alignments 3B and 3B Modified provide 15 feet of space on both sides; therefore, they received the highest score at “7.” Alignment 3C received the lowest score at “3” because it does not provide any space on the south side of the segment east of the river.
Industrial Preservation	This category considers if the alignment promotes preservation of industrial land uses.	Scoring range was from 1 to 10, with the highest score given to the alignment that promotes the most industrial land use preservation. Alignment 3A received a slightly lower score of “6” because they widen to the north, creating lesser opportunities for preservation of existing industries. Alignment 3B received a “5” because it widens the farthest to the north, impacting a larger number of industrial businesses.

**Table 13
Alignment Ranking Results**

	Operational Safety	Future River Access	Impacts to Local Traffic During Construction	Hydraulic Impacts to River	Environmental Impacts	Future Greening Opportunities	Utility Impacts	Railroad Impacts	ROW Impact to Properties	Construction Schedule	Cost & Constructability	Maintenance	Industrial Preservation	Score	Rank
Project Development Team (Rank by Total Score)															
Weight	1	1	1	1	1	1	1	1	1	1	1	1	1		
Alignment 3A	6	6	6	6	7	5	6	6	7	6	7	5	6	79	3
Alignment 3B	8	6	8	6	6	8	6	6	4	6	7	7	5	83	1
Alignment 3BM	7	6	7	6	5	7	6	6	7	6	7	7	6	83	1
Alignment 3C	5	6	4	6	4	3	5	7	4	4	5	3	7	66	4
Project Development Team (Rank by Number of Highest Scoring Criteria)															
Weight	1	1	1	1	1	1	1	1	1	1	1	1	1	# of Highest Scores	
Alignment 3A	6	6	6	6	7	5	6	6	7	6	7	5	6	7	2
Alignment 3B	8	6	8	6	6	8	6	6	4	6	7	7	5	9	1
Alignment 3BM	7	6	7	6	5	7	6	6	7	6	7	7	6	7	2
Alignment 3C	5	6	4	6	4	3	5	7	4	4	5	3	7	4	4

4.3 Summary

Based on the results of the analysis, the PDT members identified bridge concept 4A on alignment 3B as the preferred alternative. The City will go through a process to elaborate and refine the final design for the bridge replacement, as a means of ensuring that both an architecturally distinctive and cost-effective design is selected for construction. Design details of the preferred cable-supported bridge concept (4A) could evolve into different engineering and architectural expressions of this concept, in terms of tower and cable connection form for example, in addition to aesthetic elements of colors, textures, lighting, railings and gateway elements.

In order to provide design flexibility, the PDT subsequently recommended that the design principal of Bridge Concept 4, cable supported river spans with one central pier that clears the railroad tracks and avoids the overhead 230 kV powerlines, be the preferred alternative. A range of design expressions of this principle, including Concept 4A as one example, could be considered during final design.

Appendix O
**Memorandum of Agreement (pursuant to Section 106 of the National
Historic Preservation Act of 1966)**

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE 6TH STREET VIADUCT SEISMIC IMPROVEMENT
PROJECT
LOS ANGELES, LOS ANGELES COUNTY, CALIFORNIA**

WHEREAS, the Federal Highways Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007, and applies to this project; and

WHEREAS, Caltrans has determined that the proposed replacement of the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) crossing the Los Angeles River, will have an adverse effect on the 6th Street Viaduct, a property determined to be eligible for the National Register of Historic Places (NRHP); and

WHEREAS, Caltrans has consulted with the California State Historic Preservation Officer (SHPO) pursuant to Stipulations X.C., and X.I. of the January 2004, *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (NHPA) (16 USC Section 470f), as amended, regarding the Undertaking's effects on historic properties and has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to pursuant to 36 CFR § 800.6(a)(1); and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking, has determined that the statutory and regulatory constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to the historic property during the Undertaking's implementation, and has further determined that it will resolve adverse effects of the Undertaking on the subject historic property through the execution and implementation of this Memorandum of Agreement (MOA); and

WHEREAS, Caltrans District 7 (District 7) and the City of Los Angeles (City), have participated in the consultation process and have been invited to concur in this MOA; and

WHEREAS, Caltrans shall ensure that the following stipulations are implemented; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on the historic property, and further agrees that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

Caltrans shall ensure the following stipulations are implemented:

I. AREA OF POTENTIAL EFFECTS

- A. The Area of Potential Effects (APE) for the Undertaking was established to include all areas within the vicinity of the Sixth Street Viaduct that may contain historic properties that would be directly or indirectly affected by the Undertaking. The APE included the maximum existing and proposed right-of-way, project construction easements, staging areas, and temporary or permanent changes in access. The APE is depicted as Exhibit 3 of Attachment A of this MOA.
- B. If modification of the Undertaking, subsequent to the execution of this MOA, necessitates the revision of the APE, Caltrans will consult with the City and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the City, and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with stipulation III.D below. If Caltrans and the SHPO reach mutual agreement on the proposed revisions, the City and Caltrans will submit a final map of the revisions, consistent with attachment 3 of the PA, no later than 30 days following such agreement.

II. TREATMENT OF HISTORIC PROPERTIES

- A. Prior to the start of any work that could adversely affect any characteristics that qualify the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) as a historic property, the City shall contact the National Park Service Western Region Office (NPS) in Oakland, California, to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. The City shall provide NPS 30 days to respond to their additional recordation determination request. If additional documentation is required, Caltrans shall ensure that the additional documentation is completed and accepted by NPS before the Viaduct is altered and/or demolished. The City shall prepare draft and final reports to be reviewed by Caltrans and NPS.
- B. Upon completion, copies of the documentation prescribed in subsection A of this stipulation, consisting of an acid-free xerographic copy of the report, prepared on standard 8 ½ X 11 paper, shall be retained by District 7, deposited in the Caltrans Transportation History Library in Sacramento, and offered by the City to, at a

minimum, the Los Angeles Public Library, Los Angeles Conservancy, Los Angeles City Historical Society, Historical Society of Southern California, City of Los Angeles Office of Historical Resources, and the California Office of Historic Preservation.

- C. The City shall work with the Los Angeles Public Library to place the historical information from the HABS/HAER report on a City website with a link to a public library website, such as the Los Angeles Public Library website, available to the public for a minimum period of three years. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their website.
- D. The City shall produce a documentary (motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the broader contextual history of the City of Los Angeles. The motion picture or video shall be of broadcast quality, between 30- and 90-minute duration, and shall be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries; one copy shall be submitted to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento.
- E. The City shall produce and publish a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and this bridge's place in that history. The booklet shall be similar in general format to the "Historic Highway Bridges of California" published by the California Department of Transportation (1991) and shall include high quality black and white images of the Los Angeles River Bridges, historic photographs or drawings, as appropriate and text describing each of the bridges' location, year built, builder, bridge type, significant character-defining features and its historic significance. City shall post an electronic version of the booklet on a City website and produce paper copies for distribution to local libraries, institutions and historical societies. One copy shall be submitted to the Caltrans Transportation Library and History Center in Sacramento. City shall maintain the camera-ready master booklet and produce additional copies if there is demand.
- F. The City shall install two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced.
- G. The City shall offer artifacts removed from the Viaduct during demolition to local museums, or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations.

III. PROJECT DOCUMENTS CRITERIA AND REVIEW

- A. The City shall submit to the SHPO for review and comment Design Development Drawings, and 30%, 60%, and 90% Construction Documents for work on the 6th Street Viaduct.
- B. SHPO will review the project documents included in each consultation package submitted by the City to determine whether the Project Documents conform to the criteria cited in paragraph A of this stipulation. SHPO will provide comments on each submittal to the City within 30 calendar days of receipt. If the SHPO does not comment within the time provided, the City may assume that the SHPO concurs that the package conforms with the criteria cited.
- C. The City will incorporate SHPO comments into the Project Documents to the fullest extent. If the City revises the Project Documents in response to the SHPO comments, then no further review is required for that submittal. The City will promptly notify SHPO in writing that it has revised the Project Documents in accordance with SHPO comments.
- D. Should the City object to incorporating any SHPO comments into the Project Documents, the City will provide SHPO with written explanation of its objection. Promptly after receiving a written objection from the City, the City and SHPO shall consult to resolve the objection. If the objection is not resolve, provision of stipulation IV.C. shall be implemented.

IV. ADMINISTRATIVE PROVISIONS

A. Definitions.

The definitions provided at 36 CFR § 800.16 are applicable throughout this MOA.

B. Professional Qualifications and Standards

Caltrans will ensure that only individuals meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulations II. A-F in this MOA.

C. Discoveries and Unanticipated Effects

If Caltrans determines after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). Caltrans at its discretion may hereunder

assume any discovered property to be eligible for inclusion in the National Register in accordance with 36 CFR § 800.13 (c).

D. Resolving Objections

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA, or to any document prepared in accordance with and subject to the terms of the MOA, Caltrans shall immediately notify the other parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection. Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.
2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30 day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation:
 - a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or
 - b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
 - c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR § 800.7(c)(4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.
4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.
5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all other

actions under this MOA that are not the subject of the objection shall remain unchanged.

6. At any time during implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans. Caltrans shall establish a reasonable time frame for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. Within 15 days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the response to the objecting party. Caltrans' decision regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.
7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and any parties that have objected pursuant to section D.6 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

E. Amendments


Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult to consider such an amendment. The amendment will be effective on the date that a copy is signed by all of the original signatories. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation III.F, below.

F. Termination

1. If this MOA is not amended as provided for in Stipulation III.E, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR § 800.16(y).

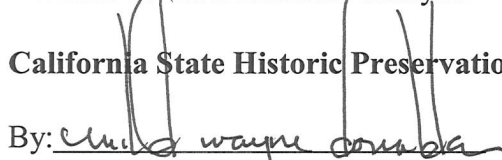
SIGNATORY PARTIES

California Department of Transportation

By: 
Jay Norvell, Chief
Division of Environmental Analysis

Date: 5/6/10


California State Historic Preservation Officer

By: 
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Date: 10 MAY 2010

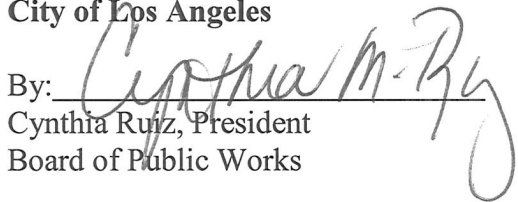
CONCURRING PARTIES

California Department of Transportation

By: 
Michael Miles, District Director
District 7, Los Angeles

Date: 5/25/2010

City of Los Angeles

By: 
Cynthia Ruiz, President
Board of Public Works

Date: 8/19/10

Attachment A: APE MAPPING

The APE Map is being kept on file with the City of Los Angeles and Caltrans.

Appendix P
Air Quality Conformity Concurrence by FHWA



U.S. Department
of Transportation
**Federal Highway
Administration**

**Federal Highway Administration
California Division**

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (fax)

January 5, 2010

In Reply Refer To:
HDA-CA
EA 07-25120

Doug Failing, District Director
California Department of Transportation
District 7
100 South Main Street, Suite 100
Los Angeles, CA 90012-3606

Attention: Andrew Yoon, Senior Transportation Engineer

Dear Mr. Yoon:

SUBJECT: Project-Level Conformity Determination for the 6th Street Viaduct Seismic Improvement Project, City of Los Angeles

On November 25, 2009, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for the project-level conformity determination for the 6th Street Viaduct Seismic Improvement Project in the City of Los Angeles pursuant to 23 U.S.C. 327(a)(2)(B)(ii)(1). The project is in an area that is designated nonattainment or maintenance for ozone, coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide (CO), and nitrogen dioxide (NO₂).

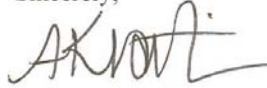
The project-level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Government's (SCAG) currently conforming *2008 Regional Transportation Plan (RTP)*, and the *2008 Regional Transportation Improvement Program (RTIP)*. The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on January 14, 2009. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

Based on the information provided, FHWA finds that the 6th Street Viaduct Seismic Improvement Project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.



If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg, FHWA Air Quality Specialist, at (916) 498-5889.

Sincerely,

A handwritten signature in black ink, appearing to read "AKW", with a horizontal line extending to the right.

For
Walter C. Waidelich, Jr.
Division Administrator