5.0 PRELIMINARY ENVIRONMENTAL REVIEW

5.1 INTRODUCTION
A preliminary environmental review was performed on the proposed freeway improvements that form Concept C, which encompasses the three freeway corridors (SR-91, I-605 and I-405) under study. This environmental review also covers proposed conceptual transportation improvements that have been developed for 33 intersections within the study area.

5.2 PURPOSE OF THE STUDY
The purpose of this environmental review was to identify and disclose potential environmental impacts relatively early in the conceptual design process in order to help inform study decision-making and the level of environmental clearance that may ultimately be required. It is understood that the conceptual design of the proposed improvements will continue to evolve based on additional technical studies; trade-offs associated with project benefits, environmental concerns and cost; and stakeholder feedback. Likewise, the nature and extent of potential environmental impacts would also change in accordance with future changes made to the conceptual design.

5.3 ANALYSIS APPROACH
The main effort of the analysis was devoted to identifying localized, direct impacts to sensitive environmental resources in close proximity to the proposed transportation improvements. For the freeway sections, environmental concerns were mapped using environmental reference numbers that tie to accompanying tables that list and describe the key environmental considerations. Within the tables, identified environmental issues and considerations were generally grouped based on the specific transportation element of Concept C responsible for generating the potential environmental impacts. This was done to provide needed flexibility because certain transportation elements may be modified, added, or dropped as Concept C moves forward into further study. For the intersections, environmental considerations were mapped and described directly on the plan sheets.

The results of the freeway and arterial intersection environmental analyses are presented in detail in Appendices K and L. The analyses identify and briefly describe environmental concerns and considerations related to the proposed improvements on a site-specific basis, focusing on direct and indirect physical impacts. Information is portrayed geographically for each freeway section for I-605, SR-91 and I-405 as well as for each of the 33 study area intersections.

The primary input that was used as the basis for the environmental review were the conceptual plans that were developed for the 33 arterial intersections and for the I-605, SR-91, and I-405 freeway corridors (Concept C) in June / July 2012. The environmental review was performed using aerial imagery and photography provided by Google Earth, supplemented by available
databases including assessor’s parcel mapping, Flood Insurance Rate Mapping (FIRM)s, and the environmental constraints mapping that was performed earlier in the Hot Spot Study. Preliminary findings were then reviewed with the engineering teams that developed the conceptual designs for each of the freeway corridors and the intersections to ensure that the proposed project features and related details were fully understood by the environmental team.

5.4 **SUMMARY OF KEY ISSUES**

Based on the results of the site-specific analysis presented in Appendices K and L, many of the proposed transportation improvements have similar environmental consequences throughout the study area. This analysis matches the conceptual plans that were developed for Freeway Concept C and the selected priority arterial intersections (33 total) prepared in June/July 2012. These key environmental issues are highlighted and summarized below for both Freeway Segments and Arterial Intersections.

**FREEWAY SEGMENTS**

The proposed improvements are anticipated to cause direct and indirect physical impacts upon implementation. Key issues of environmental concern related to proposed freeway segment improvements are highlighted below. As previously stated, site-specific impacts have been identified and detailed in Appendix K.

*Mainline Freeway Widening Adjacent to Residential Areas*

1. Existing soundwalls that currently line the edge of shoulder would be displaced and thus would need to be reconstructed as part of the proposed improvements in close proximity to existing residential structures and other sensitive receptors.
   - Detailed noise studies will need to be performed to determine changes in noise exposure levels to adjacent sensitive receivers post construction. However, these changes in noise levels are anticipated to be less than significant with noise abatement (soundwalls) in place.

2. Visual impacts will be experienced by some residences where new walls will be closer and/or taller than the current structures.
   - These potential visual impacts could be minimized by landscaping, hardscape, and context sensitive design solutions.

3. Mature trees and existing landscaping along the edge of the freeway also would be displaced in several sections.
• These potential impacts created by removal of existing landscaping could be minimized by landscaping, hardscape, and context sensitive design solutions.

**Bridge Widening over Existing Streets and Rail Corridors**

1. Bridge widening will cause temporary impacts to street and pedestrian circulation during construction.
   - Potential impacts can be mitigated through a traffic control plan to be prepared and coordinated with the affected jurisdictions.

2. Bridge widening will cause temporary impacts to rail service during construction over and immediately adjacent to tracks.
   - Potential impacts can be mitigated through coordination with rail service providers to schedule trains in coordination with construction scheduling to allow for minimal disruption to service during bridge construction.

3. Hazardous waste contamination has been known to occur on railroad-owned ROW
   - A Phase 1 ISA will be prepared to identify the potential contaminated properties.

**Bridge Widening(s) over Rivers and Channels**

1. Substantial bridge widening at certain locations, which may require the installation of new piers for structure support, would affect hydrology/ hydraulics within the channel and would be subjected to additional regulatory procedures.
   - Any reconstruction of the existing pier structures would be designed so as not to significantly affect hydrology/ hydraulics.
   - Potential impacts would be less than significant with application of standard design/construction methods, including best management practices (BMPs).

2. Bridge widening improvements and construction activities within and surrounding water channels may require certain permits from the Regional Water Quality Control Board, Army Corps of Engineers, and California Department of Fish and Game.
   - Additional technical studies will need to be prepared to determine the potential effects to water quality and to Species of Special Concern (e.g., preliminary jurisdictional delineation).
3. The recreational trail along the San Gabriel River would be temporarily impacted during bridge widening construction activities.
   - Potential impacts would be mitigated through a transportation management plan to be prepared and coordinated with the affected local and regional agencies.

**Widening and Realignment of Freeway Interchange Ramps and Connectors**

1. Interchange widening and realignment will require the removal of existing mature trees, landscaping, improvements and facilities (including existing BMP’s), which would be permanently disturbed within the ROW.
   - Permanent project related impacts would be mitigated by replacement of improvements and facilities using current standards.

2. Circulation would be temporarily disrupted during the construction period.
   - Potential impacts can be mitigated through a traffic control plan to be prepared and coordinated with the affected local and regional agencies.

**Stormwater Treatment**

1. New and evolving requirements for storm water runoff from the freeway will need to be evaluated in future phases of project development.
   - Requirements will need to be evaluated to identify impacts to design. Coordination with local communities will be needed.

2. Circulation Caltrans BMPs will have to be evaluated and incorporated which could impact the extent (or footprint) of a project.
   - Impacts will be assessed during future phases of project development to determine the need for modifications to the project.

**Temporary Construction Easements (TCEs)**

1. During construction, property would be occupied on a temporary basis to accommodate construction activities. TCEs will be required in many sections along the freeway corridors, particularly where the mainline traffic lanes and ramping are on retained fill. These TCEs are not depicted on the conceptual plans because additional engineering detail and topographical information is needed to define the TCE boundaries. However, a good rule of
thumb to use to identify potential TCE areas would be all those parcels that lie within a 10-foot buffer area of the proposed edge of improvement will be impacted where the freeway is at a markedly different elevation than the surrounding properties.

2. TCEs are less likely to be needed where the roadway improvements are proposed at grade (i.e., at ramp termini locations or at arterial intersections.)

3. TCEs will not be required directly adjacent to new structures or bridge widenings, which are supported by columns. However, since many of the proposed bridge widenings also include sections of retaining fill on the approaches, TCE’s will be necessary for those properties in direct proximity (10-foot buffer) where existing retaining walls are being replaced or where new retaining walls need to be built.

**ARTERIAL INTERSECTIONS**

The proposed improvements to relieve congestion at the 33 arterial intersections within the study area generally consist of the addition of turning lanes or the extension of existing turning lanes to provide for additional queuing/storage capacity for certain turning movements that are undersized. In a few cases, roadway modifications related to access management are also proposed to improve traffic flow through the intersection or address potential safety issues.

Where possible, these improvements would occur within the existing street right of way by removing and rebuilding the existing roadway median and/or modifying on street parking and/or restriping the roadway to provide the additional space needed within the existing street for the turning lane modifications. However, many of the proposed intersection improvements involve modifications to the existing street width from curb face to curb face on the approach and/or departure legs. And, while every attempt was made to accommodate the proposed improvements within existing street rights of way, additional right of way would need to be acquired from property owners for some of these intersections.

An initial review indicates that very few, if any, of the proposed intersection improvements rise to the level of a significant adverse impact if “best practices” construction procedures are followed and if steps are taken to minimize, avoid, or mitigate potential impacts. However, there are some instances, such as where a gas station property may be directly impacted by a partial acquisition along the edge of the parcel, when additional investigation, such as an Initial Site Assessment (ISA) and perhaps a follow on Preliminary Site Investigation (PSI), would need to be performed to identify (or discount) the presence of hazardous materials and thus the extent and severity of a potential impact. In these cases, additional environmental study would be required during the environmental phase of project development.

In addition, this initial environmental review was conducted based on what was observable from the conceptual plans and available parcel mapping and aerial photography. As the proposed improvements advance into more detailed engineering studies, other or additional
environmental impacts may be revealed. For example, proposed street modifications may affect underground utilities, which in turn, may need to be relocated outside of existing street right of way.

5.5 **ENVIRONMENTAL DOCUMENTATION LIKELY REQUIRED**

**FREEWAY SEGMENTS**

Environmental documentation that would likely be required during the environmental analysis phase for proposed freeway improvements would be dependent upon the source of funding assistance utilized for the project. A Preliminary Environmental Analysis Report (PEAR) will be needed for state highway projects and a Preliminary Environmental Study (PES), will be prepared for local assistance projects. Documents needed to satisfy the National Environmental Policy Act (NEPA) include Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement. California Environmental Quality Act (CEQA) environmental review and documentation includes Categorical Exemption, Negative Declaration/Mitigated Negative Declaration, or Environmental Impact Report.

The projects will also require further environmental documentation to satisfy the requirements of Federal and State agencies. It is anticipated that most of the proposed freeway improvements will require a PEAR which will determine the specific type of environmental document. The PEAR is developed during the Project Study Report – Project Development Support (PSR (PDS)) phase of project development for state highway projects, which will be recommended for many of the freeway segments analyzed in this Feasibility Study.

**ARTERIAL INTERSECTIONS**

The type of environmental document that would likely be required during the environmental analysis phase to clear the proposed intersection projects under the California Environmental Quality Act (CEQA presumes that only local (non-federal) funds would be utilized for project construction and that few, if any of the proposed intersection improvements rise to the level of significant, adverse impacts if “best practices” construction procedures are followed and if steps are taken to minimize, avoid or mitigate potential impacts. It is reasonable to assume that the local jurisdiction, the City or the County, would serve as the environmental lead agency, with the possible exception of the freeway ramp intersections.

It is important to note that much is left to the discretion of the lead agency as to what type of environmental process, and thus environmental document, would need to be pursued. The intersection projects fall into the following groups:

- Those intersection projects that consist of restriping or of only minor geometric modifications to existing street infrastructure to provide additional queuing storage would likely qualify for a Categorical Exemption (CE) under CEQA.
Some intersections, such as those projects that would result in sliver acquisitions of private property and yet where there is no substantial evidence to indicate that a significant adverse impact would occur, can be addressed with either a CE or an Initial Study/Negative Declaration (IS/ND) dependent upon the discretion of the CEQA lead agency.

Yet other proposed intersection projects would require additional study to determine the severity and extent of the potential impacts and to identify what actions would be necessary to avoid, minimize, or mitigate the potential impacts below significance. Examples include those intersections where additional capacity is proposed, and where a proposed acquisition would directly impact the use of a protected resource (i.e., community park) or where hazardous materials may be present, or where a partial acquisition may impact the existing use of the parcel such that a full acquisition would be triggered. In these cases an IS/ND or an IS/MND (Mitigated Negative Declaration) would be recommended.

Lastly, there are a few arterial intersections which are functionally tied into the operations of freeway on-ramps and off-ramps. At this early stage in the project development process it would be difficult to demonstrate logical termini and independent utility from the proposed freeway concepts that show major modifications to these interchange ramps. It is therefore recommended that the environmental evaluation of these intersections be packaged with the preliminary environmental review process conducted for the associated freeway improvements, so that the full potential environmental effects can be evaluated, disclosed, and understood.

### 5.6 Water Quality Considerations

A preliminary evaluation was performed of potential water quality considerations associated with the development of freeway improvements along the SR-91/I-605/I-405 freeway corridor. The potential water quality considerations for the study area are important to address to meet water quality regulations governing surface waters and to prevent contamination of local water resources. Potential water quality considerations are summarized in Table 1 of Appendix M. The information presented in this table is based upon the potential Best Management Practices (BMPs) proposed in the Stormwater Management Corridor Studies (Corridor Studies), as prepared by Caltrans, within the SR-91/I-605/I-405 study area. The evaluation was principally based on the completed Corridor Studies that identifies 146 potential BMP sites within the study area. The implementation of BMPs will treat and reduce pollutants carried in storm water runoff from the construction and operation of the project.

The State of California and Regional Water Quality Control Boards assess water quality data for California's waters every two years to determine if they contain pollutants at loads that exceed the pollutant limits required under Section 303(d) of the Federal Clean Water Act. The
information in Table 1 (Appendix M) lists these bodies of water that are on the 303(d) list, which includes rivers, creeks, and lakes within their city and watershed jurisdictions. For water bodies on this list the state has to develop a Total Maximum Daily Load (TMDL) for pollutants that cause the water to be listed. Moreover, various environmental permits that may be required to protect water quality during the construction and operation of the BMPs are identified in the table. The drinking water reservoirs and/or recharge facilities within the project limits that these BMPs will be discharging into are identified in the table with respect to its city jurisdiction. The potential BMPs that will utilize reuse of soils containing Aerially Deposited Lead (ADL) are identified in the table with respect to its corresponding city. A compilation of this data is categorized with respect to its location within its city jurisdiction of the potential BMPs because the project area extends across multiple city jurisdictions.

The results of the preliminary water quality evaluation will be included in the preparation of Caltrans Storm Water Data Reports in support of the development of each Project Study Report-Project Development Support (PSR-PDS) during the next phase of project development; the Project Initiation Document (PID) phase.