



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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## **REQUEST FOR PROPOSALS**

# **Sacramento River Viaduct and West End Viaduct Deck Rehabilitation**

**FOR DESIGN AND CONSTRUCTION ON STATE HIGHWAY**

Sacramento/West Sacramento in Sacramento and Yolo Counties

**DISTRICT 03, ROUTE US-50/I-5**

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**CONTRACT NO. 03-2F21U4**

**03- US-50 PM 2.5-3.2/L0-0.06 & I-5 PM 23.6/24.2**

**Project ID 03130001724**

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**Federal Aid Project  
ACBHNH-000C(362)N**

**Addendum No. 1 Issued September 5, 2013**

The Department issues this Addendum No. 1 to inform Proposers of the following changes and corrections to the RFP.

## **INSTRUCTIONS TO PROPOSERS**

The Instructions to Proposers is modified as indicated by the deletions and additions set forth below.

Replace “03-2F12U4” with “03-2F21U4” throughout the document.

## **BOOK 1 DESIGN-BUILD CONTRACT**

The Book 1, Design-Build Contract, is modified as indicated by the deletions and additions set forth below.

Replace “03-2F12U4” with “03-2F21U4” throughout the document.

## **BOOK 2 PROJECT REQUIREMENTS**

The Book 2, Project Requirements, is modified as indicated by the deletions and additions set forth below.

### **Section 1 General**

Section 1.3.2 “Project Limits” is modified as indicated below:

#### ***1.3.2 Project Limits***

The Project is located in Sacramento and Yolo Counties in the Cities of Sacramento and West Sacramento. The Project limits are as follows:

The Project Limits for the work to be performed on or about the Route 50 portion of the project extend from Post Mile (PM) 2.5 in Yolo County through PM 0.06 in Sacramento County. For that work to be performed on and about Interstate 5, the Project Limits extend from PM 23.6 through 24.2 in Sacramento County. The project generally consists of placing overlays; replacing all bridge joint seals and/or joint seal assemblies; and correcting drainage issues on Sacramento River Viaduct (Br. No. 24-0004L/R); West End Viaduct (Br. No. ~~24~~-0069L/R); and the associated on-ramps, off-ramps, and connector ramps as shown in the contract documents.

It is anticipated that all Project related work will be accommodated within existing State Right of Way and that no additional Temporary Construction Easements, Permanent Easements, Rights of Entry, acquisition of Right of Way, or other access or procurement efforts will be necessary for successful completion of the intended Scope of Work. If Design-Builder identifies or desires any additional R/W related access, attention is directed to Section 1.3.1 and the requirements therein regarding Department approval for changes in the Basic Configuration.

Section 1.3.3 “General Description” is modified as indicated below:

### ***1.3.3 General Description***

The Design-Builder shall not rely on the physical description contained in this Section 1 to identify all Project components. The Design-Builder shall determine the full scope of the Project via a thorough examination of the RFP and the Project Site, or as may be reasonably inferred from such examination.

The Project nominally consists of the following:

#### **Sacramento River Viaduct (Br. No. 24-0004L/R):**

- Place 3/8” multi-layer polymeric overlay throughout limits as shown on Plan Sheets in Reference Information Documents (RID).-
- Remove AC overlay on ramp A6.
- Place appropriate overlay throughout all on-ramp, off-ramp, and connector-ramp locations in compliance with limits as shown on Plan Sheets in the RID.
- Replace all joint seal, finger joints ~~and~~, and joint seal assemblies throughout structure.
- Remove and replace finger joints and membrane seals in spans 22, ~~and~~ 25 and Ramp A2 with ~~modern joints that have a movement rating of six inches.~~ joint seal assemblies.
- Clean, repair, and ~~upgrade~~ restore entire drainage system throughout structure and ramp system limits.
- Mitigate for the known ponding -issues located on ramp A-6 between Bent A6-41 and A6-42.
- Mitigate for the known ponding- issues located on ramp A-13 between Bent A13-27 and A13-28.
- Replace all existing 3-piece drainage grates with 1-piece drainage grates or Department approved alternate design grates.
- Replace approach slabs at Abutment 44L and 44R of the Mainline Structures with Type R(30S) approach slabs

#### **West End Viaduct (Br. No. 24-0069L/R):**

- Place 3/4” polyester concrete overlay throughout structure limits as shown on Plan Sheets included in the RID.
- Place appropriate overlay throughout all on-ramp, off-ramp, and connector-ramp locations in compliance with limits as shown on Plan Sheets included in the RID.
- Replace all joint seal, finger joints, and joint seal assemblies throughout structure.
- Clean, repair, and ~~upgrade~~ restore entire drainage system throughout structure and ramp system limits as shown on Plan Sheets included in the RID.

- Replace all existing 3-piece drainage grates with 1-piece drainage grates or Department approved alternate design grates.

**General:**

Environmental compliance

Signing and striping

Business development and public information activities

~~Maintenance, repair, and upgrade of existing ramp metering systems as affected by Project specific work.~~ Maintain, repair, and restore existing ramp metering systems to normal functioning condition, if the Design-Builder's work in any way, shape, or form affects or damages said metering systems.

Traffic handling and public safety

Erosion control including slope stabilization and storm water pollution prevention.

Section 1.3.4 "Cooperation" is modified as indicated below:

***1.3.4 Cooperation***

Attention is directed to Section 5-1.20, "Coordination With Other Entities" and Section 5-1.36D, "Non-Highway Facilities," of the Standard Specifications and these project requirements. It is anticipated that work by other contractors may be in progress adjacent to or within the limits of this project during progress of the work on this contract. Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Design-Builder shall cooperate with all the other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

When 2 or more contractors are employed on related or adjacent work, or obtain materials from the same material source, each shall conduct their operations in such a manner as not to cause any unnecessary delay or hindrance to the other.

Each contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

A list of ongoing contracts within the Project limits includes but is not limited to:

- Department EA:03-0F230  
Rehabilitate two bridge decks on the Camellia City Viaduct. This project is ongoing and scheduled to be completed by November of 2015.
- Department EA: 03-3F600  
Ramona Avenue Extension scheduled to commence in October of 2013.
- Department EA: 03-4M850  
Placing Rubberized Asphalt Concrete Overlay from Watt Ave Overcrossing to Sunrise Boulevard Overcrossing on Highway 50 is scheduled to commence in January of 2014.

- Department EA: 03-3F170  
Gore paving at numerous locations along routes 5, 50, 51 and 99 scheduled to commence in October 2014.
- Department EA: 03-0F880  
Install Native landscaping at various locations along Route 50. This project is ongoing -and scheduled to be completed in December of 2015
- Department EA: 03-3797U  
Replace PCCP with HMA along I-80 at post miles M0 to M10.4. This project is scheduled to be completed in November of 2015.
- [Department EA: 03-4M5104](#)  
[Place a multi-layer polymer overlay on the left and right structures of Jefferson Boulevard Undercrossing. This project is scheduled to be completed in December of 2014.](#)

The Design-Builder shall at all times accommodate the schedule and traffic control necessary for the Camellia City Viaduct project (03-0F230) when determining scheduling and traffic control needs for this project (03-2F21U.) When an irresolvable conflict arises between these two projects, priority shall be given to the needs of the Camellia City Viaduct project with this project remaining subordinate. When the Design-Builder believes that an irresolvable conflict will occur, notice will immediately be provided to the Department, in writing, so that any appropriate resolution may be pursued timely.

## Section 2 Project Management

Section 2.4.2.1 “Standards” is modified as indicated below:

### 2.4.2.1 Standards

The Design-Builder shall perform the Work in accordance with the relevant requirements of the standards listed by priority below.

If there is any conflict in standards, adhere to the standard with the highest priority. However, if the Design-Builder’s submittal has a higher standard than any of the listed standards, adhere to the submittal standard.

If there is any unresolved ambiguity in standards, it is the Design-Builder’s responsibility to obtain clarification from the Department before proceeding with design and/or construction.

Use the most current version of each listed standard as of the initial publication date of this RFP unless modified by addendum or contract change order.

- Special Provisions\* [\(including Design-Build Modification\)](#)
- Caltrans Standard Specifications [\(including Design-Build Modification and revisions\)](#)
- Standard Plans [\(including Revisions\)](#)
- Department Technical Memoranda
- Caltrans *CADD User Manual*
- AASHTO/NSBA *Steel Bridge Collaboration—Shop Detail Drawing Review/Approval Guidelines*

- AASHTO/NSBA *Steel Bridge Collaboration—Shop Detail Drawings Presentation Guidelines*
- AASHTO/NSBA *Steel Bridge Collaboration—Steel Bridge Fabrication QC/QA Guide Specification*

Remaining ~~standards~~ Standards set forth in Book 3

~~\*Document modified for design-build.~~

“Released for Construction Documents” of Section 2.4.2.4.4 “Quality Manual” is modified as indicated below:

#### Released for Construction Documents

Released for Construction Documents shall constitute the documents issued for the purposes of construction.

The Design-Builder shall ensure:

- That no construction Work is undertaken without Released for Construction Documents.
- That the timing of submission of Released for Construction Documents is indicated in the Project schedules.
- That all Work, including modifications to the Work, is designed under the authority of and signed by a California-licensed Professional Engineer.

All Released for Construction Documents shall meet the following requirements:

- The Design-Builder shall prepare plans that are similar in appearance and content as shown in the *Plans Preparation Manual* (PPM). Variations may result due to design-build delivery. The Design-Builder shall meet with Department to obtain Approval of any variations in plan content and format.
- The Design-Builder shall prepare all drawings in accordance with Department CADD standards.
- The Design-Builder shall prepare all electronic drawings in MicroStation 8.0 or newer. All electronic data shall be prepared in Civil 3D [2012](#) SP2.1 with conversion to .pdf available. All reports and documents shall be prepared in Microsoft 2007 or later format (e.g. Microsoft Word (.docx), Microsoft Excel (.xlsx), etc)
- The Design-Builder shall ensure that all deliverables containing CADD data shall be in MicroStation 8.0 or newer, see Section 4.1 of *Caltrans CADD Users Manual*, or Civil 3D [2012](#) SP2.1 format for design deliverables, see Sections 3.6 and 3.7 of the *Caltrans CADD Users Manual*. This shall include CADD data received from other agencies.
- The Design-Builder shall ensure that all Microstation drawings, and associated documents are organized in a logical manner, have a uniform and consistent appearance, and clearly depict the intention of the design and construction.
- The Design-Builder shall follow general plotting requirements as stated in Section 4.1 of the *Caltrans CADD Users Manual*.
- The Design-Builder shall ensure that all designs and drawings are in U.S. Survey Foot.
- The Design-Builder shall include the limits of excavation for all excavation work.

- The Design-Builder shall include quantities in all Released for Construction Documents for all items which require inspection or testing in accordance with the Materials Control Schedule (MCS).

The Design-Builder shall ensure that all special provisions, shop drawings, and other items necessary to construct the Work are submitted as Released for Construction (RFC) packages and include the following (at a minimum):

- Cover Sheet with submittal description and schedule activity identification,
- Design Quality Manager Certification in accordance with the Quality Manual,
- Design plans/Design Reports
- Design calculations
- Specifications and Special Provisions

“As-Built Documents” of Section 2.4.2.4.4 “Quality Manual” is modified as indicated below:

As-Built Documents

The Design-Builder shall deliver to Department As-Built Documents that depict the final completed Project, including all changes from Released for Construction submittals, and data showing all items such as the electrical systems, drainage systems, lighting systems, underground and overhead Utilities, traffic controls and striping, signing placement, highway alignment and grade revisions, typical sections, and all other relevant data, including any operations and maintenance manuals for mechanical and electrical systems.

The Design-Builder shall ensure that the As-Built Documents meet the requirements of the Released for Construction Documents and the following additional requirements (see Section 4.3 of the *Caltrans CADD Users Manual* and the *Caltrans Construction Manual*):

- As-Built Documents shall include all base mapping (topography), design plans (including shop drawings), design calculations, design reports, specifications, and electronic CADD data.
- The Design-Builder shall ensure that all title blocks of calculation sheets include the calculation title, file number, page number, initials of the designer and the checker, and dates of design and checking.
- The Design-Builder shall ensure that all structure calculations performed using software are independently checked by a California-licensed Professional Engineer with ten (10) years minimum experience. The Design-Builder shall ensure that all calculations are verified.
- The Design-Builder shall ensure that all calculations indicate the design requirement, the assumptions made, the methods used, the source of the information, and the cross-reference for the applicable design drawings.
- The Design-Builder shall provide bridge load rating calculations and information [if the Design-Builder’s work increases loading upon the structure in excess of the overlay.](#)
- The Design-Builder shall ensure that all calculations are readily accessible, clear, understandable, concise, complete, and accurate.
- The Design-Builder shall ensure that all calculations are bound and numbered with a table of contents.

- The Design-Builder shall ensure that all calculations identify the code or standard utilized and indicate the specific section referenced in the right hand column.
- In the calculations, the Design-Builder shall reference the computer programs used.

The Design-Builder shall ensure that all manual calculations are printed, neatly and legibly, on 8½-inch by 11-inch or 11-inch by 17-inch standard computation sheets.

The Design-Builder shall ensure that the As-Built Documents reflect the actual condition of the constructed Work. The Design-Builder's Project Manager shall sign and date the title sheet of the As-Built Plans to certify that the Project was completed in accordance with the plans, the Contract Documents, the governmental approvals, and applicable law.

The Design-Builder shall collect, properly identify, and deliver to Department all original diaries, logs, notebooks, accounts, records, reports, and other documents prepared in the performance of the Contract upon completion or termination of the Contract.

### **Section 3 Public Information**

Section 3.2.5.1 "Construction Activities and Maintenance of Traffic Information" is modified as indicated below:

#### **3.2.5.1 Construction Activities and Maintenance of Traffic Information**

The Design-Builder shall collect and maintain current and accurate information of construction activities, including location, estimated duration of activity, type of work being performed, physical impacts (e.g., lane closures, narrowed lanes, commercial vehicle restrictions, etc.), and planned construction detours. The Design-Builder shall update this information as conditions change. The Design-Builder shall also collect information about how Work activities affect traffic flow and movement.

Information gathered by the Design-Builder shall be reviewed for accuracy and forwarded as soon as it becomes available (within a maximum of two hours) to the Department and prior to dissemination.

The Design-Builder shall collect and disseminate this information to the Project's public Web site and to the Department. The Design-Builder shall enter the information in Department's 511 Condition Acquisition and Reporting System (CARS). In developing the functional requirements, the Design-Builder's data collection and management approach shall include the following:

- Type of information to be collected and stored
- Aggregation of data
- Data collection methodology
- User data needs
- Archiving procedures
- Access to information (will vary depending on user – i.e., Department versus general public)

In addition:

- Information gathered by the Design-Builder shall be posted on the Project's public Web site no later than one business day after it becomes available.
- The Design-Builder shall work with the Department to coordinate and develop the technical interfaces between the Project's public Web site, the construction information recorded, and any other relevant information dissemination systems identified by the Design-Builder and/or Department.
- Changes in information gathered by the Design-Builder shall be posted immediately by the Design-Builder to the Project's public Web site as described in Section 3.2.7.2.1.
- The Design-Builder shall coordinate the dissemination of information (construction, commercial vehicle, incident, etc.) with the Department, other agencies, and relevant customers (e.g., the media) throughout the Project.
- The Design-Builder shall be responsible for the accuracy and reliability of the information provided.

This information includes changes to short-term construction-related closures or emergency closures and changes, in scheduled construction activities. The Design-Builder shall report on all unscheduled activities as quickly as possible.

The Design-Builder shall meet the following requirements for providing information:

- All planned construction activities shall be recorded no later than thirty (30) [Calendar](#) Days before planned start date and shall include possible construction noise impacts.
- Construction information updates/changes shall be recorded within 24 hours of the information being made available to the Department and the Project's public Web site.
- Construction updates (i.e., planned closure cancelled, planned nighttime construction noise impacts canceled or completed, lane closed, closure removed, etc. that directly affect the public) shall be monitored by the Design-Builder. The Design-Builder shall immediately notify the Department of changes. Upon Department's approval of such changes, the Design-Builder shall post the information on the Web site, and disseminate it through other technologies.
- All information, unless otherwise stipulated in advance by the Department, shall be verified for accuracy and approved by the Department before release.

The Design-Builder shall maintain basic information, contact names, and phone numbers for other construction projects that may affect traffic conditions on the Project or surrounding local street network. This information shall be included in the construction information maintained by the Design-Builder.

The Design-Builder shall verify, record, maintain, and make all of the above construction information available to the Department for use and dissemination.

The Design-Builder shall operate and maintain the construction information dissemination process for the entire duration of the Work. The process shall operate 24 hours a Day, seven Days

a week. Requests for information and system faults shall be acknowledged within two hours of notification and resolved within the following two hours. The Design-Builder shall provide regular reports as requested, summarizing activities and adherence to the Contract requirements.

Recording and dissemination of information shall be operational within fourteen (14) [Calendar Days](#) following NTP1.

The Design-Builder shall include the following types of information and minimum performance requirements in the Public Information Plan.

Section 3.2.5.1.1 “Construction Schedule” is modified as indicated below:

#### **3.2.5.1.1 Construction Schedule**

Construction notification shall be made available to the Department and publicized by the Design-Builder through its information tools (see Section 3.2.7) seven [\(7\) Calendar Days](#) prior to the beginning of construction in any area of the Project.

Notification of construction events shall include the following:

- Description of the activity
- The start of the activity
- The end of the activity
- Detours (if applicable)
- Hours of work

The Design-Builder shall provide current construction information to the Department as an input to incident management strategies to prevent traffic from being rerouted into areas of construction-related congestion.

Section 3.2.5.1.8 “Utility Shut-Offs” is modified as indicated below:

#### **3.2.5.1.8 Utility Shut-Offs**

Regular communication with businesses and/or residents affected by Utility shut-offs shall be conducted by the Design-Builder to mitigate the impacts of potential Utility disruptions. The Design-Builder shall personally contact all affected businesses and residents and shall maintain a record of each notification. The Design-Builder shall provide a written notice to the affected parties at least 48 hours in advance of the Utility shut-off. Notices shall indicate the expected duration of the outage and provide information indicating how those affected by the outage can contact the Design-Builder. Such notices shall also be provided to the Department and the [Cities of Sacramento and West Sacramento and Yolo](#) Counties of Sacramento and Yolo.

The Design-Builder shall provide an emergency Utility contact list of all Utility Owners’ representatives with facilities within the Project Site as part of the Public Information Plan. The Design-Builder shall be responsible for keeping the emergency Utility contact list updated on at least a quarterly basis.

Section 3.2.7.2.3 “Newspaper Advertising” is modified as indicated below:

**3.2.7.2.3 Newspaper Advertising**

For all major lane closures (closures exceeding 30 minutes delay), newspaper advertising shall be utilized to inform the public of the closure. Advertisement shall be run 2 day starting at least 3 days prior to the start of the closure, and shall adhere to the following requirements:

- Be advertised in at least two newspapers with circulation in ~~Sacramento~~ Sacramento and Yolo Counties as well as the largest paper of record in the Bay Area..
- Advertisement shall be a minimum size of 1/8 of a page and be approved by the Department prior to purchase

**Section 4 Environmental Compliance**

“Environmental Standards and Requirements” of Section 4.2.1 “Standards” is modified as indicated below:

**Environmental Standards and Requirements**

Priority	Agency	Title
1	Department	Exhibit 4-A, Environmental Commitments Record
2	Department	Exhibit 4-B, MS4 Stormwater Permit
3	Department	Standard Environmental Reference
<u>4</u>	<u>Department</u>	<u>Design-Build Modification to the Special Provisions</u>
<del>45</del>	Department	<del>Standard</del> Special Provisions
<del>56</del>	Department	<u>Design-Build Modifications to the Standard Specifications</u> <del>Standard Specification 2010 (including Revisions)</del>
<del>67</del>	Department	<del>Design-Build Modifications to the Standard Specifications</del> <u>Standard Specification 2010 (including Revisions)</u>
<del>78</del>	Department	Standard Plans 2010 (including Revisions)
<del>89</del>	Department	Construction Site Best Management Practices (BMPs) Manual
<del>910</del>	Department	Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
<del>1011</del>	Various	Technical Memoranda
<del>112</del>	RWQCB	SUSMP Requirements
<del>1213</del>	Department	Volume II, CT Environmental Handbook; Cultural Resources
<del>1314</del>	Department	Volume III, CT Environmental Handbook; Biological Resources
<del>1415</del>	Department	Volume IV, CT Environmental Handbook, Community Impact

“Table 01” of Section 4.2.3 “Permits” is modified as indicated below:

<b>Table 01: Project Environmental Permit, Agreement, and/or Approval Responsibilities</b>							
<b>REQUIRED PERMITS, AGREEMENTS, &amp; Approvals</b>	<b>N/A</b>	<b>COORDINATE</b>	<b>PREPARE APPLICATION</b>	<b>OBTAIN</b>	<b>IMPLEMENT</b>	<b>RENEW</b>	<b>AMEND</b>
404 USACOE							
401 RWQCB							
NPDES SWRCB							
State Waste Discharge Requirements (Porter Cologne) RWQCB							
FESA Section 7 USFWS		DT		DT		DT	DT
BO Section 7 USFWS		DT		DT		DT	DT
FESA Section 7 NOAA/NMFS		DT		DT		DT	DT
BO Section 7 NOAA/NMFS		DT		DT		DT	DT
FESA Section 10 USFWS							
EFH - NOAA/NMFS		DT		DT		DT	DT
		<del>DT</del>		<del>DT</del>		<del>DT</del>	<del>DT</del>
		<del>DT</del>		<del>DT</del>		<del>DT</del>	<del>DT</del>
1602 DFG							
2080.1 DFG		DT		DT		DT	DT
2081 DFG		DT		DT		DT	DT
Air Quality Permits							

“Erosion and Sediment Control Specialist” of Section 4.2.6.1.1 “Environmental Personnel” is modified as indicated below:

***Erosion and Sediment Control Specialist***

The Design-Builder shall assign a California Licensed ~~Landscape Architect~~Civil Engineer, in accordance with Section 14 Landscape of Book 2 with Certified Professional in Erosion and Sediment Control (CPESC) Certification with detailed knowledge, skills, and experience in each of the following:

- Permit requirements and application processes, design standards, specifications, and special provisions for storm water facilities.
- Selection, design, and implementation of permanent best management practices. Design and implementation of temporary best management practices in compliance with the NPDES permit. The Certified Erosion Control Specialist shall be responsible for the installation and maintenance of all temporary and permanent erosion and sediment control during the life of the project. The Certified Erosion Control Specialist shall perform the required weekly erosion control inspection reports.

“Aerially Deposited Lead” of Section 4.4.1.1 “Contaminated Materials” is modified as indicated below:

***Aerially Deposited Lead***

Aerially deposited lead is lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions. ADL is typically found within the top five (5) feet of material in unpaved areas within the highway ROW. ADL is present within the planned ROW limits. To verify the preliminary classification of soil, the soil may either be sampled in situ (before excavation) or sampled from stockpiles after excavation. The Design-Builder shall use a laboratory certified by the California Department of Health Services for testing of samples. Sampling, analysis and reporting of test results shall be performed according to USEPA, SW-846 “Test Methods for Evaluating Solid Waste,” Volume II; Field Manual Physical/Chemical, Chapter Nine, Section 9.1.

**GIS Data Collection**

The locations of samples/borings shall be recorded in the field, using the Department’s GPS NAD83 datum. The Design-Builder shall be provided with an electronic Microsoft Access 2000 Database file to record investigative data for each boring, sample, and test performed. GPS data shall be recorded in accordance with the allowable format and tolerances required in the *Caltrans Surveys Manual*. All borings shall be identified by a pre-assigned unique identification number system as described below.

**Borehole Naming Convention**

For Borehole naming convention, the Design-Builder shall use a 3-digit unique ID assigned by Department followed by a dash and sequential boring numbers beginning with “101C”. (Example: for this project where the assigned Unique ID is 964, the borehole names would be 964-101C, 964-102C, 964-103C, etc.)

**Sample Naming Convention.**

For sample naming convention, the Design-Builder shall label the sample with the name of the borehole from which it was derived, followed by a dash and the depth of the sample in meters. For this project, samples taken from borehole 964-101C at the surface, 0.60 meters and 0.90 meters would be named 964-101C-0, 964-101C-0.60 and 964-101C-0.90, respectively.

The sample data and analytical results shall be recorded in the appropriate tables. Note that the database tables are related such that the borehole data record must be created first, followed by

sample data records, and finally the analytical result records. The Design-Builder shall collect GPS data at the completion of each boring sample.

The Design-Builder shall submit a final electronic file of the GIS database in conjunction with the submittal of an electronic file of the final sampling results.

If sampled in situ, the Design-Builder shall follow the same protocol used in the Lead SI sited above. The sample depths shall be defined as follows:

- The surface sample is taken between 0 and 6 inches;
- The one-foot sample is taken between 1 and 1.5 feet;
- The two-foot sample is taken between 2 and 2.5 feet;
- The three-foot sample is taken between 3 and 3.5 feet, and
- The five-foot sample is taken between 4.5 and 5 feet.

Grading samples only need to be taken in the surface, one-foot and two-foot layers. Widening and footing samples need to be taken in the surface, one-foot, two-foot, three-foot and five-foot layers.

The Design-Builder shall submit for review and approval, a work plan at least three (3) weeks prior to sampling and testing areas for ADL, pH and Title 22 metals. All samples shall be tested for total lead, Total Threshold Limit Concentration (TTLC). All samples with TTLC exceeding 50 mg/kg shall be tested for soluble lead, Soluble Threshold Limit Concentration (STLC), using the California Waste Extraction Test (WET) by EPA Method 3050A (Citrate Acid). The Design-Builder shall test 50 % of the samples using STLC. Any STLC results equal to or greater than 5 mg/L shall be tested using the De-Ionized Water (DI-WET) method. Any TTLC results exceeding 1,000 mg/kg shall be tested using the Toxicity Characteristic leaching Procedure (TCLP) with extraction by EPA Method 1311. A total of 30% of all soil samples with the highest TTLC values shall be tested using the TCLP method. 10% of all samples shall be tested for pH. 5% of all soil samples with highest TTLC values shall be tested for Title 22 metals.

The Design-Builder shall comply with the Department of Toxic Substances Control's Variance in handling ADL material and recognizing the purpose of 'SB14 Hazardous Waste Source Reduction', the Design-Builder shall reuse all the ADL contaminated soils that meet the Variance criteria. The Design-Builder shall survey the locations where ADL soil is reused according to the DTSC Variance. These locations shall be shown on the as-built plans and the coordinates shall be provided. During construction of previous projects within the project limits ADL contaminated soils were reused per the DTSC Variance.

The Design-Builder shall prepare special provisions identifying the limits, extent of ADL, and handling of ADL in accordance with the Variance for each design submittal. The Design-Builder shall prepare an LCP and an Evacuation and Transportation Plan (ETP). The LCP and ETP shall be submitted for review and approval 2 weeks prior to excavation activities.

The LCP shall prevent or minimize worker exposure to lead while handling material containing ADL. It shall include perimeter air monitoring incorporating upwind and downwind locations. Daily monitoring shall take place, under the direction of a Certified Industrial Hygienist, while the Design-Builder clears, grubs and performs earthwork operations.

The ETP shall include an excavation schedule, temporary locations of stockpiled material, appropriate plastic sheeting to cover the stockpiles, locations of samples and laboratory results, dust control measures, the proposed site for disposal of the hazardous waste and a spill contingency plan for ADL soil.

Unless all soil is tested in situ, grab samples shall be taken from stockpiled soil. The Design-Builder shall comply with DTSC Variance for reuse of stockpiled soil. At least one sample shall be taken for each 200 cubic yards of stockpiled soil and tested for lead using EPA Method 6010 or 7000 series.

Excavation, transportation, reuse and disposal of material containing ADL shall be in conformance with all environmental laws.

The Design-Builder shall perform and submit a statistical analysis of laboratory results in accordance with the SW-846 and as specified in the DTSC Variance. The Design-Builder shall determine:

- If the soil is defined as a hazardous waste per CCR Title 22 due to the total lead concentration greater than 1,000 mg/kg and/or soluble lead concentration greater than 5.0 mg/L or,
- If the Variance issued by DTSC to reuse soil containing lead on-site is applicable, and under what conditions the lead contaminated soil can be reused

The Design-Builder shall note that No statistical analysis shall be performed if none of the samples contained hazardous levels of lead. ~~The Design-Builder bids should assume the Project contains the following quantities of ADL:~~

~~• Type Y 1 ADL: 39,000 cubic yards (may be reused on Project)~~

~~• Type Y 2 ADL: 131,000 cubic yards (may reused on Project)~~

~~• Type Z 3 ADL: 8,820 cubic yards~~

Once the Design-Builder has completed the permanent placement of material containing aurally deposited lead in conformance with the requirements of the Contract Documents, the Design-Builder shall have no further responsibility for such materials in place. The Design-Builder will not be considered a generator of such contaminated materials, except as expressly provided in the Contract. Further cleanup, removal or remedial actions for such materials will not be required if handled or disposed of as specified herein.

The Design-Builder is required to notify the DTSC in writing prior to Work in the vicinity of the discovery, fence off the area and notify the Department. The Design-Builder shall not resume Work in the area until receiving notification-allowing Work to re-commence.

Section 4.4.1.6 "Wildlife" is modified as indicated below:

#### **4.4.1.6 Wildlife**

This project is within or near habitat for the following regulated species: Bats.

The Design-Builder is responsible for providing at least one biologist to monitor construction and other activities that may harm regulated species.

Within seven (7) days after Contract approval, the Design-Builder shall submit each biologist's name, resume, and statement of qualifications. The Department will have seven (7) days for the review and approval of the biologist's qualifications. If the submittal is incomplete, the Department will provide comments. Within 7 days of receiving the Department's comments, the Design-Builder shall update and resubmit qualifications data and any other information requested by the Department. The Design-Builder shall not begin any construction activity until a minimum of one biologist has been authorized by the Department. .

Biologists must have at least one (1) year of experience conducting bat surveys and excluding bats from structures during construction projects.

The Design-Builder's biologist must prepare a Natural Resource Protection Plan (NRPP) that defines measures the Design-Builder will take to protect bats.

The Design-Builder will submit the NRPP within seven (7) [Calendar](#) days after Contract approval. The Design-Builder shall allow seven (7) [Calendar](#) days for the Department's review. If the submittal is incomplete, the Department will provide comments. Within seven (7) [Calendar](#) days after receiving the Department's comments, Design-Builder shall update and resubmit the NRPP.

The natural resource protection plan must be prepared and signed by a biologist approved by the Department.

The natural resource protection plan must include:

1. List of species and habitats addressed in the plan
2. Design for bat exclusion Protection measures for bats
3. Implementation plan for protection measures, including monitoring schedule
4. Monitoring duties
5. Justification for each instance where protection measures and an implementation plan are not necessary for a regulated species
6. Schedule for inspecting protection measures
7. Schedule for maintaining protection measures
8. Schedule for submittal of monitoring reports
9. Response plan for instances where regulated species are encountered

The Design-Builder shall submit the following reports to the Department within the specified timeframes:

Pre-construction survey report shall be submitted within seven (7) days before beginning any construction activities.

Monitoring Reports according to the schedule in the Natural Resources Protection Plan.

Incident Report within 24 hours of the incident.

Annual Monitoring Report no later than January 15 during each year of construction.

Final Monitoring Report no later than seven (7) days after completion of the project.

1. All reports must include the following: Name(s) of the biologist(s) conducting biological activity
2. Date(s) and time(s) of monitoring
3. Locations and activities monitored
4. Representative photographs
5. Findings
6. If regulated species are observed, reports must recommend actions to protect the regulated species
7. Name of the biologist who prepared the report
8. Signature of the biologist certifying the accuracy of the report

The Pre-Construction Survey Report includes one of the following:

1. Detailed observations and locations where regulated species were observed
2. Statement that no regulated species were observed by each biologist

The Incident Report includes:

1. Description of any take incident
2. Species name and number taken
3. Corrective actions proposed or taken
4. Incidental take details, including species name, number taken, people contacted, contact information, and disposition of taken species

The Annual Monitoring Report includes:

1. Construction beginning and ending dates
2. Identification of project impacts on the species covered in the plan
3. Species protection measures with protection measure implementation details
4. Incidental take details, including species name, number taken, people contacted, contact information, and disposition of taken species

The Final Monitoring Report must be a cumulative report following the format of the Annual Monitoring Report.

Within the project area the Design-Builder will implement the following protection measures:

1. Upon discovery of a regulated species, stop construction activities within a 10 ft radius of the discovery immediately notify the Department. Do not resume activities until receiving notification from the Department.

2. Survey the work area for regulated species within fourteen (14) days before starting construction activities.
3. Install exclusionary devices as described in the Natural Resource Protection Plan (14-6.07)
4. Exclusionary devices will be installed in bridge joints that provide roost habitat for bats.
5. Exclusionary devices will be installed between December 15 and February 15.
6. After the exclusionary devices have been installed, the Design-Builder must wait fourteen (14) days, and have an authorized biologist perform exit surveys to document that all bats have exited the joint, before beginning work on those joints.

## Section 7 Right Of Way

“Right of Way Standards and Requirements” of Section 7.2.1 “Standards” is modified as indicated below:

### Right of Way Standards and Requirements

Priority	Agency	Title
1	Department	Right of Way Manual
2	FHWA	Uniform Relocation Assistance and Real Property Acquisition Policies Act 1970 as amended
3	Department	Survey Manual
4	Department	Project Development Procedures Manual (PDPM) and Highway Design Manual (HDM)
5	Department	CADD Users Manual
6	Department	Plans Preparation Manual
7	Department	<a href="#">Design-Build Modification to the</a> Special Provisions
<del>8</del>	<del>Department</del>	<del>Special Provisions</del>
<del>89</del>	Department	Design-Build Modifications to the Standard Specifications <del>for Construction</del>
<del>910</del>	Department	<del>2010</del> Standard Specifications <a href="#">2010</a> (including Revisions)
<del>1011</del>	Department	<del>2010</del> Standard Plans <a href="#">2010</a> (including Revisions)
<del>1112</del>	Department	Technical Memoranda

~~See remaining~~ [Remaining](#) Standards ~~and References~~ [set forth](#) in Book 3

## Section 9 Land Surveying

Section 9.1 “General” is modified as indicated below:

## 9.1 General

The Design-Builder shall perform all work necessary to meet the requirements associated with land surveying, including project, and supplemental horizontal and vertical control surveys, subsequent mapping and topographic surveys, bridge-site surveys, utility surveys, soils surveys, construction surveys, as-built surveys, and all other land surveying services necessary to complete the project in an accurate, neat, and timely fashion. ~~When Department Standards exist for survey activities, such~~ All surveying shall be done in accordance with the Department’s Standards. This work shall not include primary horizontal and vertical control ~~data surveys. -surveys, right of way engineering, right of way surveys, and all land surveying associated with right of way engineering close out activities and right of way monumentation.~~

The Department will ~~perform~~ provide primary horizontal and vertical control ~~data, surveys, right of way surveys, right of way engineering including close out activities, and right of way monumentation required in support of the work.~~

Section 9.2.1 “Laws, Standards, and Specifications” is modified as indicated below:

### 9.2.1 Laws, Standards, and Specifications

All of the land surveying work performed by the Design-Builder shall be conducted in accordance with the requirements of California Statutes and the standards and specifications listed below. Note: the standards and specifications below are listed by order of priority. Also, the most current version of each shall be used unless otherwise specified herein or modified by an Addendum or Change Order.

If there is any ambiguity in the laws, standards, or specifications, the Design-Builder shall seek clarification from the Department before doing the work.

In the event of a conflict among the standards set forth in Book 3 relating to land surveying, the order of precedence shall be as set forth below, unless otherwise specified:

Priority	Agency	Title
1	State	All California Law
2	Department	Surveys Manual
<del>3</del> <u>3</u>	<del>Department</del> <u>Department</u>	<del>Standard Specifications</del> <u>Design-Build Modifications to the Standard Specifications</u>
<del>34</del> <u>45</u>	Department	Standard Specifications <u>2010</u>
<del>45</del> <u>56</u>	Department	Standard Plans <u>2010</u>
<del>56</del> <u>67</u>	Department	Safety Manual
<del>67</del> <u>78</u>	Department	Plans Preparation Manual and the CADD Users Manual
<del>78</del> <u>78</u>	Federal Geographic Data Committee (FGDC)	Geospatial Accuracy Standards, Part 3. National Standards for Spatial Data Accuracy

Section 9.2.6 “Department Supplied Information” is modified as indicated below:

### **9.2.6 Department Supplied Information**

The Department will provide all Department land surveying data relevant to the project which may include, but not limited to, the following items:

The location and coordinate values of the available horizontal and vertical control stations within the Project, Exhibit 9-A.

Existing Horizontal and Vertical Control

Engineering survey data.

Photogrammetric mapping.

Right of Way mapping.

Land net retracement mapping, [if available](#).

~~Design Utilities branch provides as-built data~~

Section 9.2.7 “Safety Requirements” is modified as indicated below:

### **9.2.7 Safety Requirements**

The [Design-Builder’s](#) Survey Manager and all staff performing land surveying tasks for this project shall have a thorough knowledge and understanding of all of the relevant safety practices and procedures as outlined in the *Caltrans Safety Manual* and the *Caltrans Surveys Manual*. The Design-Builder’s land surveying staff shall be properly outfitted with the necessary safety equipment to perform any surveying as part of this project.

Section 9.5.5 “Survey Base Map” is modified as indicated below:

### **9.5.4.15 Survey Base Map**

The Design-Builder shall provide to the Department ~~an as-built~~ [a](#) survey base map file in MicroStation v8 format (.DGN). This file shall include:

- ~~Tress~~ [Trees](#) or natural vegetation, all public and private roads, curbs, edge of road, power and telephone poles, signs, sidewalks, underground and above ground utilities, manholes, fences, buildings, hydrographic features such as lakes, rivers, streams and natural channels, drainage and irrigation structures, and contours of the original terrain per section 3.8 sub-section B of the *Caltrans CADD Users Manual*.

The Design-Builder shall provide [to the Department in](#) an XML file written in schema 1.0 containing coordinate geometry and feature code information for the above mentioned utilities, property information, centerline alignments, and survey control items.

The Design-Builder shall provide [to the Department in](#) an XML file written in schema 1.0 consisting of all as-built storm sewer, roadway drainage, and structure drainage related systems.

All ~~as-built~~ survey files shall be delivered within thirty (30) Working Days of Substantial Completion of the Project.

## **Section 10 Earthwork**

Section 10.2.1 “Standards” is modified as indicated below:

### 10.2.1 Standards

In the event of a conflict among the standards set forth in Book 3 relating to grading, the order of precedence shall be as set forth below, unless otherwise specified:

<i>Priority</i>	<i>Author or Agency</i>	<i>Title</i>
<u>1</u>	Department	<u>Design-Build Modifications to the Special Provisions</u>
<del>2</del>	Department	<del>Standard</del> -Special Provisions
<u>3</u>	Department	<u>Design-Build Modifications to the Standard Specifications</u>
<del>24</del>	Department	Standard Specifications <u>2010*(including Revisions)</u>
<del>35</del>	Department	Highway Design Manual
<del>46</del>	Department	Storm Water Quality Handbook – Project Planning and Design Guide
<del>57</del>	Department	Technical Memoranda
<del>68</del>	Department	Geotechnical and Pavement Manual
<del>79</del>	Department	Asbestos and Regulated Waste Manual for Structure Demolition or Relocations for Construction Projects
<del>810</del>	Department	Construction Manual

Remaining Standards ~~listed~~ set forth in Book 3

~~\*Documents modified for Design-Build.~~

## Section 12 Drainage

Section 12.2.1 “Standards” is modified as indicated below:

### 12.2.1 Standards

Design and construct the drainage systems in accordance with the relevant requirements of the standards listed by priority below.

If there is any conflict in standards, adhere to the standard with the highest priority. However, if the Design-Builder’s Submittal has a higher standard than any of the listed standards, adhere to the Submittal Proposal standard.

If there is any unresolved ambiguity in standards, it is the Design-Builder’s responsibility to obtain clarification from the Department before proceeding with design and/or construction.

Use the most current version of each listed standard as of the initial publication date of this RFP unless otherwise specified herein or modified by addendum or change order.

<b>Drainage Standards</b>		
<b>Priority</b>	<b>Agency</b>	<b>Title</b>
1	Department	Highway Design Manual
2	Department	Bridge Design Specifications (LFD Version, April 2000)

3	Department	Bridge Design Aids
4	Department	Bridge Design Details
5	Department	Bridge Design Practice
6	Department	<u>Design-Build Modification to the Standard</u> Special Provisions
7	<u>Department</u>	<u>Special Provisions</u> <del>and Non-Standard Special Provisions [A1]</del>
<del>78</del>	Department	<del>Standard Specifications 2010 (including Revisions)</del> <u>Design-Build Modifications to the Standard Specifications</u>
<del>89</del>	Department	<del>Design-Build Modifications to the Standard Specifications</del> <u>Standard Specifications 2010 (including Revisions)</u>
<del>910</del>	Department	Standard Plans 2010 (including Revisions)
<del>1011</del>	Department	Construction Site Best Management Practices (BMPs) Manual
<del>1112</del>	Department	Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
<del>1213</del>	Department	Project Planning and Design Guide
<del>1314</del>	Department	Construction Manual
<del>1415</del>	Department	Design Information Bulletin 83
<del>1516</del>	FHWA	Hydraulic Engineering Circular Number 21 (HEC-21) Design of Bridge Deck Drainage Systems

Remaining Standards set forth in Book 3.

Section 12.2.4 “Coordination with Other Agencies and Disciplines” is modified as indicated below:

***12.2.4 Coordination with Other Agencies and Disciplines***

The Design-Builder shall coordinate all water resource issues with local agencies, affected interests, and regulatory agencies in accordance with Book 2, Section 4 Environmental Compliance. ~~The Design-Builder shall document the resolutions of issues for the correspondence file, including meeting minutes and memoranda for the record.~~

~~The Design-Builder shall comply with and document the permit requirements, modifications, and contacts with the permitting agencies.~~

Section 12.3.1 “Project Requirements” is modified as indicated below:

***12.3.1 Project Requirements***

The Design-Builder shall complete the following for the Sacramento River Viaduct:

- Clean, repair, and ~~upgrade~~ restore entire drainage system throughout structure and ramp system limits.

- Mitigate for the known existing drainage issues located on ramp A-6 between Bent A6-41 and A6-42.
- Mitigate for the known existing drainage issues located on ramp A-13 between Bent A13-27 and A13-28.
- Replace all existing 3-piece drainage grates with 1-piece drainage grates or Department approved alternate design grates

The Design-Builder shall complete the following for the West End Viaduct:

- Clean, repair, and ~~upgrade-restore~~ entire drainage system throughout structure and ramp system-limits ~~as shown on Plan Sheets included with these Contract Documents.~~
- Replace all existing 3-piece drainage grates with 1-piece drainage grates or Department approved alternate design grates

The Design-Builder shall clean, repair, and restore the entire drainage systems throughout the West End and Sacramento River Viaducts until such time that there is no impediment to the flow of water. The Design-Builder shall clean the drainage system commencing at the bridge deck and through existing system to the system outlet. If the current drainage system flows into a drainage system, the Design-Builder shall clean the drainage inlet to the bottom of said inlet. The drainage systems including, drainage inlets, shall be cleaned such that no debris impedes the flow of water originating from the bridge deck.

If any portion of the drainage system(s) is found not to be suitable and repairs are not feasible, the drainage system(s) shall be restored to current design standards. The Design-Builder shall contact the Department and submit three (3) alternatives to correct the drainage system(s). The Department shall have fifteen (15) Calendar Days to review the plans and accept or reject with comments.

Section 12.3.2 “Standards” is modified as indicated below:

### **12.3.2 Surface Hydrology**

The Design-Builder shall perform surface hydrology work at locations known to have ponding issues. The locations known to have ponding issues are at ramp A-6 between Bent A6-41 and A6-42 and at ramp A-13 between Bent A13-27 and A13-28.

The Design-Builder shall perform surface hydrology work at any location if it is determined that the drainage system is unsuitable and repairs are not feasible.

Section 12.3.4.2.3 “Hydraulic Analysis” is modified as indicated below:

### **12.3.4.2.3 Hydraulic Analysis**

Hydraulic Analysis will be performed using an approved method listed in latest edition of the Department’s *Highway Design Manual* at ramp A-6 between Bent A6-41 and A6-42 and at ramp A-13 between Bent A13-27 and A13-28.

Section 12.5.1 “Project Drainage Overview Map” is modified as indicated below:

**12.5.1 Project Drainage Overview Map**

The Design-Builder shall submit a Project Drainage Overview Map to the Department for acceptance prior to initiating detailed design, and shall submit a copy of the Project Drainage Overview Map in MicroStation format.

The Design-Builder shall submit preliminary drainage calculations for Ramps A6 and A13 and drainage models to the Department for acceptance prior to initiating detail design.

**Section 13 Structures**

Section 13.1 “General” is modified as indicated below:

**13.1 General**

All structural design shall comply with the specifications and requirements contained in the technical manuals listed in the Structure Design and Plans Section of this provision and any additional requirements noted in these Technical Provisions. The terms “latest” and “current” applied to the manuals, documents and specifications in the Structure Design and Plans Section of this provision and these Technical Provisions will be “latest” and “current” as of the date when the Final Contract documents are signed.

~~Hydrologic investigation/scour analysis and hydraulics report is required for bridges over waterways and bridges that are adjacent to streams or waterways. Also refer to the Drainage Section in the Technical Provisions.~~

Design-Builder shall furnish individual bridge quantities and project quantities summarized on the appropriate Department Quantity Summary and Estimate Forms.

Bridge Specific Technical Provisions recommended for each structure shall over-ride the General Technical Provisions.

Section 13.2.1.1 “All Structures and Structural Appurtenances and Retaining Walls” is modified as indicated below:

**13.2.1.1 All Structures and Structural Appurtenances and Retaining Walls**

**Structures Standards**

Priority	Agency	Title
1	AASHTO	California Amendments to AASHTO LRFD Bridge Design Specifications – Latest Edition
2	AASHTO	LRFD Bridge Design Specifications, 4 <sup>th</sup> Edition and applicable Interim Revisions
3	Department	Bridge Design Specifications (LRFD Version, April 2000)
4	Department	Bridge Design Aids
5	Department	Bridge Design Details
6	Department	Bridge Design Practice, as appropriate

7	Department	Bridge Memo to Designers (MTD)
8	Department	Bridge Standard Detail Sheets (XS Sheets)
9	Department	Seismic Design Criteria
10	Department	Structural Detailing Standards
<del>11</del>	<del>Department</del>	<del>Standard Plans</del>
<u>11</u>	<u>Department</u>	<u><a href="#">Design Build Modifications to the Special Provisions</a></u>
<u>12</u>	<u>Department</u>	<u><a href="#">Special Provisions</a></u>
<del>12</del> <u>13</u>	Department	<u><a href="#">Design Build Modifications to the</a></u> Standard Specifications
<u>14</u>	<u>Department</u>	<u><a href="#">Standard Specifications 2010 (including Revisions)</a></u>
<u>15</u>	<u>Department</u>	<u><a href="#">Standard Plans 2010 (including Revisions)</a></u>
<del>13</del> <u>16</u>	Department	Bridge Deck Construction Manual
<del>14</del> <u>17</u>	Department	Falsework Manual
<del>15</del> <u>18</u>	Department	Foundation Manual
<del>16</del> <u>19</u>	Department	Office of Special Funded Projects (OSFP)

[Remaining Standards set forth in Book 3](#)

Section 13.3.1 “Bridge Design” is modified as indicated below:

***13.3.1 Bridge Design***

The OSFP Information and Procedures Guide shall apply to all of the following items listed below.

- Structure ~~Type Selection~~ Rehabilitation Strategy
- Unchecked Details Submittal
- PS&E Deliverables, Review & Approval

Section 13.3.4.1 “Approach Slabs” is modified as indicated below:

***13.3.4.1 Approach Slabs***

The Design-Builder shall ~~inspect-replace~~ structure approach slabs at Abutments 44L and 44R of the Sacramento River Viaduct (Br No 24-004L/R) for deficiencies. Results of previous condition analysis performed by the Department can be found in Structure Maintenance Reports. Approach slab ~~repairs or replacements, if required,~~ shall be addressed as part of the bridge ~~Type Selection~~ Rehabilitation Strategy Process.

Delete Section 13.3.5.1 “Advance Planning Studies”.

Section 13.4.3 “Finger Joint Replacement (with Joint Seal Assembly)” is modified as indicated below:

***13.4.3 Finger Joint Replacement ~~(with modular joint MR=6")~~(with Joint Seal Assembly)***

The existing finger joints-joint seals shall be replaced with Joint Seal Assemblies in accordance with the scope of work set forth in the contract documents. Any proposed changes to the scope of work or contract documents shall be submitted to the Department in accordance with the contract documents.

Section 13.4.4 "Replace Unsound Concrete" is modified as indicated below:

***13.4.4 Replace Unsound Concrete***

The Design-Builder shall remove and replace unsound concrete as outlined in section 15-5 "Bridge Rehabilitation" of the *Caltrans Standard Specifications* up to a depth of three (3) inches.

The Contract Price shall include a lump sum price "Replace Unsound Concrete" for the following quantities:

- 3,300 Cubic Feet for the Sacramento River Viaduct ~~Bridges~~
- 1,900 Cubic Feet for the West End Viaduct ~~Bridges~~

The unit price specified for Replace Unsound Concrete shall include all work required for removal and replacement of unsound concrete including traffic control.

For any section of unsound concrete that is at a depth of greater than three (3) inches, the work shall be compensated as a time and materials change order per Book 1, Section 13.7. The work shall include all work required for removal and replacement of unsound concrete including traffic control.

Add Section 3.4.5 "Barrier Rail" as indicated below:

***13.4.5 Barrier Rail***

West End Viaduct (Br. No. 24-0069L/R)

The Design-Builder shall ensure existing barrier rail heights are maintained.

Sacramento River Viaduct No. (Br. No. 24-0004L/R)

The Design-Builder shall place a 3/8" thick multilayer polymer overlay from face of barrier to face of barrier. No taper will be required.

Add Section 3.4.6 "Polyester Concrete Overlay" as indicated below:

***13.4.6 Polyester Concrete Overlay***

The Design-Builder shall place a 3/4-inch polyester concrete overlay throughout the structure limits as shown on the preliminary plans included in the RID.

Polyester concrete overlay shall conform to the requirements of the *Caltrans Standard Specifications and Special Provisions*.

Design-Builder shall determine the final grade and cross slope and submit to Department for Approval prior to start of overlay work.

Department shall Approve the exact percentage of polyester resin binder.

The Contract Price shall include a lump sum price “Furnish Polyester Concrete” for the following quantity:

- [TBD] Cubic Feet

The lump sum price specified for place polyester concrete overlay shall include all work required for preparation of bridge deck and placement of polyester concrete overlay including traffic control.

Section 13.5.1 “Structure Construction Forms and Documents Required” is modified as indicated below:

### ***13.5.1 Structure Construction Forms and Documents Required***

The Design-Builder shall submit following completed forms and documents to the Department:

- Any Test Result Summary sheet for materials or components incorporated into the project on either a temporary or permanent basis;
- Notice of Change in Clearance or Bridge Weight Rating, (Form TR-0019);
- Notice of Change in Vertical or Horizontal Clearance;
- Joint Movement calculations for all joint seals and joint seal assemblies;
- Structures as-built plans;
- Bridge demolition plans;
- Final bridge deck profile;
- Shop Plans for ~~Modular Joint Seals (MR=6”)~~; [Joint Seal Assemblies](#)
- Shop Plans for New Deck Grates and/or any portion of work related to the replacement of the Deck Grates;
- Shop Plans for Installation of all joint seals;
- Project Plans for drainage related work on [Sacramento](#) River Viaduct (Br. No. 24-0004L/R);
- Shop Plans for drainage related work on Sacramento River Viaduct (Br. No. 24-0004L/R);
- Project Plans for the overall Deck Rehabilitation Procedure;

The Design-Builder shall provide the Department with completed project files at the end of the project.

## **Section 14 Landscape**

“Landscape Standards” of Section 14.2.1 “Standards” is modified as indicated below:

**Landscape Standards**

Priority	Agency	Title
1	Department	Highway Design Manual (HDM)
<del>2</del>	<del>Department</del>	<del>Design-Build Modifications to the Special Provisions</del>
<del>23</del>	Department	Special Provisions
<del>4</del>	<del>Department</del>	<del>Design-Build Modification to the Standard Specifications</del>
<del>35</del>	Department	Standard Specifications 2010 (including <del>r</del> Revisions)
<del>46</del>	Department	Standard Plans 2010 (including <del>revisions</del> Revisions)
<del>57</del>	Department	Construction Site Best Management Practices (BMPs) Manual
<del>68</del>	Department	Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
<del>79</del>	Department	Project Planning and Design Guide
<del>810</del>	Department	The Plant Setback and Spacing Guide
<del>911</del>	Department	Final Environmental Document
<del>1012</del>	Department	Technical Memoranda
<del>1113</del>	Department	Landscape Architecture Program P.S.&E. Guide

Remaining Standards set forth in Book 3.

Section 14.2.3.1 “Project Landscape Architect” is modified as indicated below:

**14.2.3.1 Project Landscape Architect**

The Design-Builder shall assign a ~~Landscape Architect licensed~~ Licensed Civil Engineer ~~to Engineer to~~ practice in the State of California to perform or directly supervise the tasks required in this Landscape section.

Delete Section 14.3.1 “Landscape Concept Meeting”

Section 14.3.2 “Requirements” is modified as indicated below:

**14.3.2 Requirements**

Design and construct all landscape elements to meet the following performance requirements:

At a minimum, erosion control treatment to disturbed slopes, ~~and~~;

~~Provide a natural, aesthetically pleasing appearance without decreasing motorist safety;~~

~~Use of native species of plant material;~~

Is maintainable and prevents erosion.;

The Design-Builder shall maintain and protect existing vegetation. The Design-Builder shall not damage any vegetation unless the vegetation is impeding the flow of water from the structure, through the drainage system and into the drainage inlets. If any vegetation is found in any drainage inlets which are utilized by drainage system, the vegetation shall be removed.

~~The Design Builder shall prepare all necessary studies and applicable design reports to justify all the project landscape elements used in the project.~~

~~The Design Builder shall design all temporary landscape elements to comply with the same design and construction requirements as that of the permanent landscape elements.~~

## Section 16 Signing and Pavement Marking

Section 16.2.1.2 “Permanent Signing Standards“is modified as indicated below:

### 16.2.1.2 Permanent Signing Standards

Priority	Agency	Title
1	Department	California Manual on Uniform Traffic Control Devices (CA MUTCD)
2	Department	Highway Design Manual
<del>3</del>	<del>Department</del>	<del>Design-Build Modifications to the Special Provisions</del>
<del>34</del>	Department	Special Provisions <del>and Non-Standard Specifications</del>
<del>45</del>	Department	<del>Design-Build Modifications to the Standard Specifications</del> <del>Standard Specifications 2010 (including Revisions)</del>
<del>56</del>	Department	<del>Design-Build Modifications to the Standard Specifications</del> <del>Standard Specifications 2010 (including Revisions)</del>
<del>67</del>	Department	Standard Plans 2010 (including Revisions)
<del>78</del>	Department	Sign Specifications
<del>89</del>	Department	2011 HOV Guidelines for Planning, Design, and Operations
<del>910</del>	Various	Technical Memoranda and Preliminary Engineering Documents
<del>1011</del>	AASHTO	A Policy on Geometric Design of Highways and Streets
<del>1112</del>	AASHTO	Standard Specifications for Structural Support for Highway Signs, Luminaires, and Traffic Signals, 4 <sup>th</sup> Edition with 2002, 2003, and 2006 Interims
<del>1213</del>	AASHTO	Roadside Design Guide
<del>1314</del>	Department	Plans Preparation Manual
<del>1415</del>	Department	CADD Users Manual

Remaining Standards set forth in Book 3.

~~\*Document modified for design-build.~~

Section 16.2.1.3 “Pavement Delineations Standards and Requirements” is modified as indicated below:

**16.2.1.3 Pavement Delineation Standards and Requirements**

Priority	Agency	Title
1	Department	California Manual on Uniform Traffic Control Devices (CA MUTCD)
2	Department	Highway Design Manual
<del>3</del>	<del>Department</del>	<del>Design-Build Modification to the Special Provisions</del>
<del>34</del>	Department	Special Provisions <del>and Non-Standard Special Provisions</del>
<del>45</del>	Department	<del>Standard Specifications 2010 (including Revisions)</del> <u>Design-Build Modifications to the Standard Specifications</u>
<del>56</del>	Department	<del>Design-Build Modifications to the Standard Specifications</del> <u>Standard Specifications 2010 (including Revisions)</u>
<del>67</del>	Department	Standard Plans 2010 (including Revisions)
<del>78</del>	Department	Sign Specifications
<del>89</del>	Department	HOV Guidelines for Planning, Design, and Operations
<del>910</del>	Various	Technical Memoranda and Preliminary Engineering Documents
<del>1011</del>	AASHTO	A Policy on Geometric Design of Highways and Streets
<del>1112</del>	AASHTO	Roadside Design Guide
<del>1213</del>	Department	Plans Preparation Manual
<del>1314</del>	Department	CADD Users Manual

Remaining Standards set forth in Book 3.

~~\*Document modified for design-build.~~

Section 16.3.1 “Permanent And Temporary Signing” is modified as indicated below:

**16.3.1 Permanent And Temporary Signing**

Design, furnish, and install all components of a sign system necessary to provide a complete and functional system that meets the following performance requirements:

- Comply with State requirements for all temporary ~~and permanent~~ traffic control devices.
- Provide for the orderly and predictable movement of all traffic. ~~including bicycles and pedestrians.~~
- Provide such guidance and warnings as are needed to ensure the safe and informed operation of individual elements of the traffic stream.
- ~~Should operations damage, or disturb, the existing permanent signs, you will be responsible for the work and cost for restoring those signs to their permanent installation, and up to current standards.~~

- [Maintain, repair, and restore existing permanent signs to normal functioning condition, if the Design-Builder’s work in any way, shape, or form affects or damages said signs.](#)

Section 16.3.2.4 “Striping and Pavement Markings “ is modified as indicated below:

**16.3.2.4 Striping and Pavement Markings**

- All striping details shall conform to the CA MUTCD, *Caltrans Standard Plans* and *Standard Specifications*, and *Caltrans HOV Guidelines for Planning, Design, and Operations*.
- All striping and pavement markings on the mainline and ramps shall be thermoplastic. All markers on the mainline shall conform to *Caltrans Standard Plans*.
- [Striping and pavement marking modifications that may be required on local streets shall conform to standards required by local jurisdictions.](#)
- [Before obliterating any traffic stripes, pavement markings, and pavement markers to be replaced at the same location, reference the stripes, markings, and markers. Include limits and transitions with control points to reestablish the new stripes, markings, and markers.](#)

**Section 18 Maintenance of Traffic**

“Maintenance of Traffic” of Section 18.2.1 “Standards” is modified as indicated below:

**Maintenance of Traffic Standards and Requirements**

Priority	Agency	Title
1	Department	Transportation Management Plan (TMP) Guidelines
2	Department	Technical Memoranda
3	Department	California Manual on Uniform Traffic Control Devices (MUTCD)
<a href="#">4</a>	<a href="#">Department</a>	<a href="#">Design-Build Modifications to the Special Provisions</a>
<del>45</del>	Department	<del>Standard</del> Special Provisions
<del>5</del>	<del>Department</del>	<del>Standard Plans 2010 (including Revisions)</del>
6	Department	Design-Build Modifications to the Standard Specifications
7	Department	Standard Specifications <sup>2</sup> 2010 (including Revisions)
<del>58</del>	<del>Department</del>	<del>Standard Plans 2010 (including Revisions)</del>
<del>89</del>	Department	Highway Design Manual <sup>2</sup>
<del>910</del>	Department	Plans Preparation Manual
<del>1011</del>	Department	Traffic Manual, Chapter 7

<del>11</del> 12	Department	CADD User Manual
<del>12</del> 13	AASHTO	A Policy on Geometric Design of Highways and Streets,
<del>13</del> 14	AASHTO	Roadside Design Guide,
<del>14</del> 15	Department	Ramp Meter Design Manual

~~\*Document modified for design-build.~~

Section 18.3.1 “Project Specific Requirements” is modified as indicated below:

### 18.3.1 Project Specific Requirements

The Design-Builder shall incorporate the Lane Closure Charts provided by the Department (see Exhibit 18-A). Any revisions to the Lane Closure Charts provided, or additional Lane Closures Charts required, shall be submitted to the Department for approval. The Department will have 15 Working Days to review the request.

Requests for revisions or additional Lane Closure Charts shall include:

- Delay calculations,
- The purpose of requests,
- Per lane capacity for work zone,
- Field traffic counts,
- Detour plans (if necessary).

Closures exceeding 30 minutes delay will require a major lane closure approval process. The Department will have 20 Working Days to review the request.

Major Lane Closure Approval Process requirements:

- Location and Vicinity maps showing the State Highway(s), local street network, and other adjacent lane closures or nearby work that may affect traffic during the same period. Including special events,
- Dates, times and locations of the lane closure(s),
- Description of the work being performed during the lane closure(s),
- Description of each lane closure and its anticipated affect on traffic,
- Amount of expected delay and corresponding queue length for each lane closure,
- Summary of TMP strategies that will be used to reduce delay and motorist inconvenience during the lane closure(s).
- A copy of the TMP,
- Contingency plan.

The Design-Builder shall ~~incorporate the~~provide detour routes for ~~on-rampconnector~~ closures ~~provided by the Department (see Section 18 of the RID)~~ in the ~~development of final Detour~~ Plans. ~~Any revisions to the detour~~ Detour routes provided, or additional detours required, shall be submitted to the Department for approval. The Department will have 15 Working Days to review the request. It is the Design-Builder's responsibility to contact and obtain approval from local agencies for detours on roads or streets under their jurisdiction.

The Design-Builder shall provide Sign Details plans showing how to fabricate any sign not detailed in the CA MUTCD. This includes sign dimensions, message, lettering sizes, and colors.

Prior to using shoulders or portions of shoulders as freeway lanes, the Design-Builder shall verify that the structural section of the shoulders is adequate to support existing traffic volumes.

Adopt-A-Highway activities if any shall be suspended during the project. The Design-Builder shall remove and store existing signs, reinstalling them upon completion of construction in that area. Any signs damage during storage or reinstallation shall be replaced in kind by the Design-Builder at the Design-Builder's expense.

The Design-Builder shall install Construction Area Signs prior to any field investigations, preliminary design work, or any kind of construction. See also Issuance of NTP1 and NTP2.

Temporary construction minimum lane widths shall be 11ft for the inside and middle lanes and 12ft for the outside lanes.

The Design-Builder shall provide coordination with established truck routes. And notify the Department's Regional Transportation Permit Office at least 21 Days prior to any reduction of vertical or horizontal clearance.

Section 18.3.1.1 "COZEEP" is modified as indicated below:

**18.3.1.1 COZEEP**

The Design-Builder may request for California Highway Patrol (CHP) officers in critical lane closures through the Construction Zone Enhanced Enforcement Program (COZEEP). Such service ~~does not relieve the~~ is at the discretion of the Department and CHP availability and does not relieve the Design-Builder from the responsibilities specified in Section 7-1.04, "Public Safety", and Section 12, "Temporary Traffic Control", of the Department's Standard Specifications. The request shall be submitted a minimum of seven days in advance. The Design-Builder shall be responsible for all cost accrued for CHP services ~~utilized or~~ not utilized as scheduled. Cost includes, but not limited to, cancellations or changes done within 48 hours from the scheduled time of service.

Delete Section 18.3.4. "Temporary Mainline Crossover"

Replace Chart 1 and Chart 2 of Exhibit 18-A "Lane Requirement Charts" with the attached charts.

**Section 19 Maintenance During Construction**

"Maintenance During Construction Standards and Requirements" of Section 19.2.1 "Standards" is modified as indicated below:

**Maintenance During Construction Standards and Requirements**

<b>Priority</b>	<b>Author</b>	<b>Agency Title</b>
1	Department	Maintenance Manual Volumes I and II

2	Department	Construction Manual
<u>3</u>	<u>Department</u>	<u>Design-Build Modifications to the Special Provisions</u>
<del>34</del>	Department	<del>Standard</del> -Special Provisions
<del>4</del>	<del>Department</del>	<del>Standard Plans 2010 (including Revisions)</del>
5	Department	Design-Build Modifications to the Standard Specifications
6	Department	Standard Specifications 2010 (including Revisions)
<u>7</u>	<u>Department</u>	<u>Standard Plans 2010 (including Revisions)</u>
<del>78</del>	Department	Highway Design Manual (HDM)
<del>89</del>	AASHTO	Roadside Design Guide <del>7</del>
<u>910</u>	AASHTO	Policy on Geometric Design of Highway and Streets
<del>1011</del>	Department	Project Development Procedure Manual
<del>1112</del>	Department	Technical Memoranda
<del>1213</del>	Department	Environmental Document

Remaining Standards set forth in Book 3

## Section 22 Stormwater

“Stormwater Standards” of Section 22.2.1 “Standards” is modified as indicated below:

### Stormwater Standards

	Priority	Agency	Title
1.	Department	Highway Design Manual	
<u>2</u>	<u>Department</u>		<u>Design-Build Modifications to the Special Provisions</u>
<del>23.</del>	Department	<del>Standard</del>	Special Provisions
<u>4.</u>	<u>Department</u>		<u>Design-Builder Modification to the Standard Specification</u>
<del>35.</del>	Department	Standards	Specifications 2010 (including Revisions)
<del>46.</del>	Department	Standard Plans 2010 (including Revisions)	
<del>57.</del>	Department	Project Planning and Design Guide (PPDG)	
<del>68.</del>	Department	Caltrans Treatment BMP Design Guidance Documents	
<del>79.</del>	Department	Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual	
<del>810.</del>	Department	Construction Site Best Management Practices (BMPs) Manual	
<del>911.</del>	Department	Construction Site Stormwater Quality Sampling Manual	
<del>1012.</del>	USDA	Revised Universal Soil Loss Equation, Version 2 (RUSLE II)	
<del>1113.</del>	Department	Construction Manual	

Remaining Standards set forth in Book 3.

Section 22.2.4 “Software” is modified as indicated below:

**22.2.4 Software**

The Design-Builder shall prepare all electronic drawings in MicroStation 8.0 or newer. All supporting electronic data shall be prepared in Civil 3D [2012\\_SP2.1](#) with conversion to .pdf available. All reports and documents shall be prepared in Microsoft office 2007 or later format (e.g. Microsoft Word (.docx), Microsoft Excel (.xlsx), etc.).

Section 22.5.4 “As-Built Plans” is modified as indicated below:

**22.5.4 As-Built Plans**

Upon completion of the Project, the Design-Builder shall deliver to Department a complete set of As-Built Documents and design files that incorporate all design changes and details of Accepted Work that occurred throughout the Project ~~including all permanent stormwater BMPs~~. The As-Built plans shall be signed by a licensed California Professional Civil Engineer.

Chart no. <u>1</u> Freeway Lane Requirements																																
County: <u>Sac</u>					Route/Direction: <u>I-5/Northbound</u>										PM: <u>Var</u>																	
Closure limits: <u>PM 23.6 (West End Viaduct)</u>																																
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Saturdays					<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>3</u>										<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>2</u>					
Sundays					<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>3</u>											<u>3</u>	<u>3</u>	<u>2</u>	<u>2</u>					
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REMARKS: <u>Ramp closures are covered by separate charts.</u>																																

Chart no. <u>2</u> Freeway Lane Requirements																																
County: <u>Sac</u>					Route/Direction: <u>I-5/Southbound</u>										PM: <u>Var</u>																	
Closure limits: <u>PM 23.6 (West End Viaduct)</u>																																
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Saturdays	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>3</u>																<u>3</u>	<u>2</u>							
Sundays	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>3</u>															<u>2</u>	<u>2</u>							
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