COVER SHEET

BOOK ONE
NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

APPROVED AS TO FORM:

CYNTHIA L. HASSON
Deputy County Counsel

APPROVED AS TO FORM:

STEVEN F. MAUCK
Risk Manager
TITLE SHEET

BOARD OF SUPERVISORS
COUNTY OF MONTEREY
STATE OF CALIFORNIA
Jane Parker, Chair,
Fernando Armenta,
Louis Calzagno,
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Dave Potter
Lew C. Bauman, P.E., Ph.D., Chief Administrative Officer
Paul H. Greenway, P.E., Intern Director of Public Works
Arturo A. Adlawan, P.E., Senior Civil Engineer
Douglas Poochigian, P.E., Project Manager
TRC Engineers, Design Consultant

NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

COUNTY OF MONTEREY

FOR USE IN CONNECTION WITH STANDARD PLANS, DATED MAY 2006 INCLUDING ISSUED ADDENDA; STANDARD SPECIFICATIONS, DATED MAY 2006 WITH AMENDMENTS TO MAY 2006 STANDARD SPECIFICATIONS ISSUE DATE 11-30-10; THE CURRENT LABOR SURCHARGE AND EQUIPMENT RENTAL RATES, OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, BUSINESS AND TRANSPORTATION AGENCY. THE CURRENT GENERAL PREVAILING WAGE DETERMINED BY THE DIRECTOR OF INDUSTRIAL RELATIONS IS ON FILE WITH THE DEPARTMENT OF PUBLIC WORKS.

168 West Alisal Street, 2nd floor,
Salinas, CA 93901-2438
(831) 755-4800
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STANDARD PLANS LIST

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. Applicable Revised Standard Plans (RSP) and New Standard Plans (NSP) indicated below are included in the project plans as individual Standard Plan sheets.

ACROYSMS,ABBREVIATIONS AND SYMBOLS
A10A  Acronyms and Abbreviations (Sheet 1 of 2)
A10B  Acronyms and Abbreviations (Sheet 2 of 2)
A10C  Symbols (Sheet 1 of 2)
A10D  Symbols (Sheet 2 of 2)

PAVEMENT MARKERS AND TRAFFIC LANES
A20A  Pavement Markers and Traffic Lines, Typical Details
A20B  Pavement Markers and Traffic Lines, Typical Details
A20C  Pavement Markers and Traffic Lines, Typical Details
A20D  Pavement Markers and Traffic Lines, Typical Details

EXCAVATION AND BACKFILL
A62A  Excavation and Backfill Miscellaneous Details
A62C  Limits of Payment for Excavation and Backfill Bridge
A62D  Excavation and Backfill Concrete Pipe Culverts
A62DA  Excavation and Backfill Concrete Pipe Culverts

MARKERS AND DELINEATORS
A73B  Markers
A73C  Delineators, Channelizers and Barricades

METAL BEAM GUARD RAILING
A77A1  Metal Beam Guard Railing Standard Railing Section
A77B1  Metal Beam Guard Railing Standard Hardware
A77C1  Metal Beam Guard Railing Wood Post And Wood Block Details
A77C3  Metal Beam Guard Railing Typical Line Post Embedment and Hinge Point Offset Details
A77C4  Metal Beam Guard Railing Typical Railing Delineation and Dike Positioning Details
A77F1  Metal Beam Guard Railing Typical Layouts For Structure Approach
A77J1  Metal Beam Guard Railing Connections to Bridge Railings Without Sidewalks Details No. 1
A77J2  Metal Beam Guard Railing Connections to Bridge Railings Without Sidewalks Details No. 2
A77J4  Metal Beam Guard Railing Transition Railing (Type WB)
A77L1  Metal Beam Railing Terminal System (Type SRT)

FENCE
A85  Chain Link Fence
A86  Barbed Wire and Wire Mesh Fences

CURBS AND DIKES
A87A  Curbs and Driveways
A87B  Asphalt Concrete Dikes

BRIDGE DETAILS
B0-1  Bridge Details
B0-3  Bridge Details
B0-5  Bridge Details
B0-13  Bridge Details
**JOINT SEALS**
B6-21 Joint Seals (Maximum Movement)

**BOX GIRDER DETAILS**
B7-1 Box Girder Details

**UTILITY OPENING**
B7-10 Utility Opening Box Girder
B7-11 Utility Details

**CAST-IN-PLACE PRESTRESSED GIRDER**
B8-5 Cast-In-Place Prestressed Girder Details

**BRIDGE CONCRETE BARRIERS**
B11-55 Concrete Barrier Type 732

**DRAINAGE FACILITIES**
D74B Drainage Inlets
D77B Bicycle Proof Grate Details
D79 Precast Reinforced Concrete Pipe Direct Design Method
D88 Construction Loads On Culverts
D97H Reinforced Concrete Pipe or Non-Reinforced Concrete Pipe Standard and Positive Joints

**OVERHEAD AND ROADSIDE SIGNS**
S93 Framing Details for Framed Single Sheet Aluminum Signs, Rectangular Shape
S94 Roadside Framed Single Sheet Aluminum Signs, Rectangular Shape
S95 Roadside Single Sheet Aluminum Signs, Diamond Shape
RS1 Roadside Signs Typical Installation Details No. 1
RS2 Roadside Signs – Wood Post Typical Installation Details No. 2

**TRAFFIC SAFETY**
T2 Temporary Crash Cushion, Sand Filled (Shoulder Installations)
T3 Temporary Railing (Type K)
T13 Traffic Control System for Lane Closure on Two Lane Conventional Highways

**ENVIRONMENTAL FACILITIES**
T51 Temporary Silt Fence
T59 Temporary Concrete Washout Facility

**PROJECT FUNDING SIGNS**
RSP T7 Construction Project Funding Identification Signs
SIGNATURE SHEET

BOOK ONE
NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

FEDERAL AID PROJECT NO. BRLO-5944(010)
PROJECT NO. 09-382065

The Special Provisions contained herein have been prepared by or under the direction of the following registered person.

Douglas Poochigian, P.E.
Registered Civil Engineer

7/12/2011
Date

Engineer’s Seal
State of California
Federal-Aid Project Number: BRLO-5944(010)

The bridge technical special provisions contained herein have been prepared by or under the direction of the following Registered Person.

STRUCTURES

Edward L. Tyk 2/17/09
Edward L. Tyk, P.E.; Registration Expires December 31, 2009
NOTICE TO BIDDERS

Sealed bids will be received for the work shown on the plans entitled:

SCHULTE ROAD BRIDGE
AT CARmel RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

BID FORMS for this work are included in BOOK TWO of these Special Provisions.

Sealed bids shall be received at the OFFICE OF THE CLERK TO THE BOARD OF SUPERVISORS, COUNTY OF MONTEREY, 168 WEST ALISAL STREET, 1st FLOOR, SALINAS, CALIFORNIA 93901, (MAILING ADDRESS: P.O. Box 1728, Salinas Ca 93902-1728) until 3:00 p.m. on December 6, 2011, for construction of the SCHULTE ROAD BRIDGE at Carmel River, County Bridge No. 501, State Bridge No. 44C-0115, Project No. 382065, State Project No. EA 05-141004L, Federal-Aid Project No. BRLO-5944(010), as shown on the Plans and in accordance with the specifications, these Special Provisions and other requirements therefore, at which time they shall be publicly opened and read by the Purchasing Agent in the County of Monterey, Government Center, Board of Supervisors’ Conference Room, Room 1032, 168 West Alisal Street, 1st Floor, Salinas, California 93901.

The UDBE Contract Goal is 3.3%

Special attention of the prospective bidders is called to the “Proposal Requirements and Conditions” of the Special Provisions. A bidder’s bond, issued by an admitted corporate surety company in an amount equal to at least ten percent of the amount bid must accompany the bid. A blank Bidder’s Bond form is attached to the Bid Form (Book Two).

The Bidder shall possess a valid Class “A” Contractor’s license at the time this contract is awarded.

The Project consists of construction of a new two lane bridge adjacent to and on the existing alignment, associated approach embankment grading and paving, removal of the existing bridge, and associated improvements.

The Engineer’s Estimate for the construction cost is $3,360,000.

Bidders are advised that, as required by federal law, the County of Monterey is implementing new Disadvantaged Business Enterprise requirements for Underutilized Disadvantaged Business Enterprises (UDBE). Section 2, “Proposal Requirements and Conditions,” under subsection titled “Disadvantaged Business Enterprises (DBE)” and Section 5, “General,” under subsection titled “Performance of Subcontractors” of these special provisions cover the UDBE requirements.
Attention is directed to Section 1-1.01, "General," of the Amendments issue date 11-30-10 to the Standard Specifications, Dated May 2006, regarding plain language specifications.

The County of Monterey affirms that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

This project is subject to the “Buy America” Provisions of the surface Transportation Assistance act of 1982 as amended by the Intermodal Surface Transportation Efficiency Act of 1991.

A payment bond and a performance bond each in the amount of 100 percent of the Contract are required as specified by Section 3-1.04, "Contract Bonds," of the Special Provisions.

Bids are required for the entire work described herein. Prices on alternate construction methods or materials shall be considered only when specifically called for.

Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

The CONTRACT DOCUMENTS may be examined at the following locations:

Monterey County Department of Public Works  
168 West Alisal Street, 2nd Floor  
Salinas, CA 93901-1728

Salinas Valley Builders Exchange  
20 Quail Run Circle  
Salinas, CA 93907

San Francisco Builders Exchange  
850 South Van Ness Avenue  
San Francisco, CA 94110

Sacramento Builders Exchange  
1331 "T" Street  
Sacramento, CA 95811

Builders Exchange of the Central Coast  
100 12th Street, Bldg. 2861  
Marina, CA 93933

Santa Cruz Builders Exchange  
1248 Thompson Avenue  
Santa Cruz, CA 95062

Fresno Builders Exchange  
1244 North Mariposa Avenue  
Fresno, CA 93703

McGraw Hill  
11875 Dublin Blvd. Suite A-118  
Dublin, CA 94568

The Contract Documents will be made available ELECTRONICALLY and can be downloaded for free at the following Monterey County website: http://www.co.monterey.ca.us/publicworks/bids.htm.

Plan holders must register before they can view or download the documents. A copy of the electronic files on compact-disc (CD) is also available at MONTEREY COUNTY DEPARTMENT OF PUBLIC
Pursuant to Section 1773 of the Labor Code, the Director of the California Department of Industrial Relations has ascertained the general prevailing rate or per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification, or type of worker needed to execute the Contract and are available on the internet at http://www.dir.ca.gov/dlsr/pwd/. Copies thereof are on file in the office of Department of Public Works, Salinas, California, and may be examined by any interested party on request. These wage determinations for this project as predetermined by the Director of the California Department of Industrial Relations are set forth in these Special Provisions. Addenda to modify wage rates, if necessary, will be issued to the holders of these Special Provisions. Future effective General Prevailing Wage Determinations, which have been predetermined and are on file with the California Department of Industrial Relations (http://www.dir.ca.gov/dlsr/pwd/), are referenced but not printed in these Special Provisions.

Attention is directed to the Federal minimum wage rate requirements in the Bid book. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate, which most closely approximates the duties of the employees in question. The Federal minimum wage rates are included in the Section 14 of these Special Provisions.

The U.S. Department of Transportation (DOT) provides a toll-free "hotline" service to report bid rigging activities. Bid rigging activities can be reported Mondays through Fridays, between 8:00 a.m. and 5:00 p.m., Eastern Time, Telephone No. 1-800-424-9071. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report these activities. The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

The Resource Management Agency, Department of Public Works reserves the right to reject any or all bids, or to waive any irregularities of informalities in any bids or in the bidding.

The quantities in the Bid Book (Book Two) are approximate only, being given as a basis for the comparison of bids: and the Department of Public Works does not, expressly or by implication, agree that the actual amounts of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work as may be deemed necessary or expedient by the Engineer. The bid table with item quantities included in the Sample Contract contained in Book One is strictly a sample and is not to be used for bidding purposes. All bids are to be compared on the Bid Form (Book Two) of the quantities to be done.
PAUL H. GREENWAY, P.E.
ACTING DIRECTOR OF PUBLIC WORKS
RESOURCE MANAGEMENT AGENCY -
DEPARTMENT OF PUBLIC WORKS
COUNTY OF MONTEREY
STATE OF CALIFORNIA

DATED: December 6, 2011
RESORCE MANAGEMENT AGENCY  
DEPARTMENT OF PUBLIC WORKS  
COUNTY OF MONTEREY  
STATE OF CALIFORNIA  

SPECIAL PROVISIONS  

SCHULTE ROAD BRIDGE  
AT CARMEL RIVER  
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115  

PROJECT NO. 382065  
STATE PROJECT NO. EA 05-927094L  
FEDERAL AID PROJECT NO. BRLO-5944(010)  

SECTION 1 – DEFINITION AND TERMS  

1-1.01 SPECIFICATIONS AND PLANS:  

The work embraced herein shall be done in accordance with the State of California, Department of Transportation (Caltrans), Standard Specifications, dated May 2006, and amendments to May 2006 Standard Specifications issue date 11-30-10; herein referred to as the Standard Specifications; and the State of California, Department of Transportation, Standard Plans, dated May 2006 Edition including issued addenda, herein referred to as the Standard Plans, and in accordance with the following Special Provisions.  

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions. The listing of certain salient sections from the Standard Specifications and these Special Provisions shall not in any way relieve the Contractor of complying with each and every section of the Standard Specifications.  

Amendments to the Standard Specifications set forth in these special provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.04, "Contract Components" of the Amended Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the special provisions, the indented text or table following the term shall be considered an amendment to the Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.  

The Amendments to the Standard Specifications issue date 11-30-10 can be found at:  
http://www.dot.ca.gov/hq/esc/oe/specifications/SSPs/2006-SSPs  
Updates; 2010-11_updates; S1-020H_E_A11-30-10.doc
1-1.02 INTERPRETATION OF STANDARD SPECIFICATIONS:

For the purpose of this Contract, certain terms or pronouns in place of them used throughout the Standard Specifications, shall be interpreted as follows: Attention is directed to Section 1, "Definition and Terms," of the Standard Specifications and these Special Provisions:

1-1.03 DEFINITIONS AND TERMS:

The following terms defined in Section 1, "Definitions and Terms," of the Standard Specifications shall be interpreted to have the following meaning and intent:

County: The County of Monterey, State of California

State: County of Monterey.
Any reference therein to the State of California or a State agency, office or officer shall be interpreted to refer to the County of Monterey or its corresponding agency, office, or officer acting under this contract.

Caltrans State of California Department of Transportation

Department: The Monterey County RMA - Public Works Department

Director: Chair of the Board of Supervisors

State Highway Engineer: The Director of Public Works of the County of Monterey, State of California.

Engineer: Director of Public Works of Monterey County, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Laboratory: Any established laboratory designated by the Engineer to test materials and work involved in the Contract.

Attorney General: County Counsel of Monterey County.

Standard Specifications: The 2006 Edition of the Standard Specifications with Amendments issue date 11-30-10 of the State of California, Department of Transportation (Caltrans).

1-1.04 DEFINITIONS IN SPECIAL PROVISIONS:

Whenever in the Special Provisions and other contract documents, the following terms, or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

Clerk to the Board: The Clerk to the Monterey County Board of Supervisors

Director of Public Works: The Director of Public Works of Monterey County

County: The County of Monterey, State of California
State of California Department of Transportation

Director of Public Works of Monterey County, acting either directly or through properly authorized agents, such agents acting within scope of the particular duties entrusted to them.
GENERAL DEFINITIONS OF EXISTING HIGHWAY FACILITIES WORK:

Sections 1-1.03 through 1-1.48 of the Standard Specifications are amended by adding the following:

<table>
<thead>
<tr>
<th>TYPE OF WORK</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>REMOVE</td>
<td>Remove and dispose of.</td>
</tr>
<tr>
<td>ABANDON</td>
<td>Render unserviceable, in place, by doing some kind of work.</td>
</tr>
<tr>
<td>SALVAGE</td>
<td>Remove, clean, load, haul, unload, and stack neatly at location designated by the Engineer.</td>
</tr>
<tr>
<td>RESET</td>
<td>Remove and install or place at same station location. May be moved laterally only. No alteration required.</td>
</tr>
<tr>
<td>RELOCATE</td>
<td>Remove and install or place in a new location. No alteration required.</td>
</tr>
<tr>
<td>RECONSTRUCT</td>
<td>Remove and disassemble and construct again at an existing or new location. New parts or alteration may or may not be required.</td>
</tr>
<tr>
<td>ADJUST</td>
<td>Raise or lower a facility to match a new grade line. Generally associated with raising frame and grate or frame and cover of facilities on resurfacing projects. May require some removal. Includes raising or lowering of frame and cover or frame and grate of concrete or brick manhole or circular precast concrete pipe structures by adding or subtracting raising devices only. Any changes to taper of manhole or steps is &quot;remodel.&quot;</td>
</tr>
<tr>
<td>MODIFY</td>
<td>A change which does not affect the basic framework or structure with an addition and/or subtraction to an appurtenant part. May require some removal. Includes raising or lowering frame and cover or frame and grate of drainage inlets by removing concrete or adding concrete.</td>
</tr>
<tr>
<td>REMODEL</td>
<td>Rebuild facility in same location. May require some removal.</td>
</tr>
<tr>
<td>RELAY</td>
<td>Remove and lay in an existing or new location. Generally used for pipes or culverts and appurtenances.</td>
</tr>
</tbody>
</table>
SECTION 2 - BIDDING

2-1.01 GENERAL:

The bidder's attention is directed to the provisions in Section 2, "Bidding," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions for the requirements and conditions which the bidder must observe in the preparation of the bid form and the submission of the bid.

The Bidder's Bond form mentioned in Section 2-1.13, "Bidder's Security," of the Standard Specifications with Amendments issue date 11-30-10 will be found in the Bid Form, Book Two. Bidder's security in the form of cashier's check or certified check shall be made payable to the County of Monterey.

In conformance with Public Contract Code Section 7106, a Non-collusion Affidavit is included in the Bid Form, Book Two. Signing the Bid shall also constitute signature of the Non-collusion Affidavit.

This contract will require a Class “A” Contractor's license.

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrow bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on future public works contracts.

2-1.02 FEDERAL LOBBYING RESTRICTIONS:

Section 1352, Title 31, United States Code, prohibits Federal funds from being expended by the recipient or any lower tier sub recipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal-aid contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than Federal funds have been paid for the same purposes in connection with this Federal-aid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Bid Form, Book Two. Standard Form - LLL, “Disclosure of Lobbying Activities,” with instructions for completion of the Standard Form is also included in the Bid Form, Book Two. Signing the Bid Form, Book Two shall constitute signature of the certification.
The above-referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding $100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

The Contractor, subcontractors, and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

A. A cumulative increase if $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

B. A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

C. A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal Action.

2-1.03 DESIGN ENGINEER MAY NOT BID ON CONSTRUCTION CONTRACT:

No engineering or architectural firm that has provided design services for a Project shall be eligible to bid on the contract to construct the Project. The firms ineligible to bid include the Prime Contractor for design, subcontractors of portions of the design, and affiliates of either. An affiliate is a firm that is subject to the control of the same persons, through joint ownership or otherwise.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder’s responsibility in the event it is the apparent low bidder on a future public works contracts.

2-1.04 DISADVANTAGED BUISINESS ENTERPRISE (DBE):

This project is subject to Title 49, CFR 26.13(b): entitled “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.”

The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

2-1.05 UNDERUTILIZED DISADVANTAGED BUISINESS ENTERPRISE (UDBE):

To ensure there is equal participation of the DBE groups specified in 49 CFR 26.5, the Agency specifies a goal for Underutilized Disadvantaged Business Enterprises (UDBEs). UDBe is a firm that meets the definition of DBE and is a member of one of the following groups:
1. Black Americans
2. Native Americans
3. Asian-Pacific Americans
4. Women

References to DBEs include UDBEs, but references to UDBEs do not include all DBEs.

Make work available to UDBEs and select work parts consistent with available UDBE subcontractors and suppliers.

Meet the UDBE goal shown in the Notice to Bidders or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the UDBE firm is certified as DBE at date of bid opening.

For a list of DBEs certified by the California Unified Certification Program, go to:

http://www.dot.ca.gov/hq/bep/find_certified.htm

Only UDBE participation will count towards the UDBE goal. DBE participation will count towards the Agency’s Annual Anticipated DBE Participation Level and the California statewide goal.

Credit for materials or supplies you purchase from UDBEs counts toward the goal in the following manner:

1. 100 percent counts if the materials or supplies are obtained from a UDBE manufacturer.
2. 60 percent counts if the materials or supplies are obtained from a UDBE regular dealer.
3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a UDBE that is neither a manufacturer or regular dealer. 49 CFR 26.55 defines “manufacturer” and “regular dealer.”

You receive credit towards the goal if you employ a UDBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55.

2.105A UDBE COMMITMENT SUBMITTAL:

The UDBE Goal for this contract is 3.3%

Submit UDBE information on the “Local Agency Bidder-UDBE Commitment (Construction Contracts),” Exhibit 15-G(1), form included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the UDBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder and the 3rd low bidder must complete and submit the UDBE Commitment form to the Agency. UDBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.
Other bidders do not need to submit the UDBE Commitment form unless the Agency requests it. If the Agency requests you to submit a UDBE Commitment form, submit the completed form within 4 business days of the request.

Submit written confirmation from each UDBE stating that it is participating in the contract. Include confirmation with the UDBE Commitment form. A copy of a UDBE’s quote will serve as written confirmation that the UDBE is participating in the contract.

If you do not submit the UDBE Commitment form within the specified time, the Agency finds your bid nonresponsive.

2.105B GOOD FAITH EFFORTS SUBMITTAL:

If you have not met the UDBE goal, complete and submit the “UDBE Information – Good Faith Efforts,” Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by UDBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your UDBE Commitment form shows that you have met the UDBE goal or if you are required to submit the UDBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the UDBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

1. Items of work you have made available to UDBE firms. Identify those items of work you might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate UDBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to UDBE firms.

2. Names of certified UDBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the UDBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified UDBEs through all reasonable and available means and provide sufficient time to allow UDBEs to respond.

3. Name of selected firm and its status as a UDBE for each item of work made available. Include name, address, and telephone number of each UDBE that provided a quote and their price quote. If the firm selected for the item is not a UDBE, provide the reasons for the selection.

4. Name and date of each publication in which you requested UDBE participation for the project. Attach copies of the published advertisements.

5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using UDBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
6. List of efforts made to provide interested UDBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the UDBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.

7. List of efforts made to assist interested UDBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the UDBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the UDBE assisted, nature of the assistance offered, and date. Provide copies of supporting documents, as appropriate.

8. Any additional data to support demonstration of good faith efforts.

2-1.06 DEBARMENT AND SUSPENSION CERTIFICATION:

Each bidder shall comply with Title 49, Code of Federal regulations, Part 29 “Debarment and Suspension Certification.” “Book 2, Bid Form” provides for certifications of Title 49, Part 29.

2-1.07 SUBCONTRACTORS LIST:

Each bid shall have listed therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of his total bid or $10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code.

The bidder’s attention is directed to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

A sheet for listing the subcontractors, as required herein by law, is included in the Bid.

Bidders are cautioned that this listing requirement is in addition to the requirement to provide a list of DBE subcontractors with the submittal of the bid.

2-1.08 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE WORK:

Attention is directed to Section 2-1.03, “Bid Documents,” and Section 2-1.11, “Job Site and Document Examination” of the Standard Specifications with Amendments issue date 11-30-10.

The bidder shall examine carefully the site of the work contemplated, the plans and specifications, and the proposal and contract forms therefor. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the general and local conditions to be encountered, as to the character, quality and scope of work to be performed, the quantities of materials to be furnished and as to the requirements of the proposal, plans, specifications and the contract.

The submission of a bid shall also be conclusive evidence that the bidder is satisfied as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information was reasonably ascertainable from an inspection of the site and the records of exploratory work done by the Department as shown in the bid documents, as well as from the plans and specifications made a part of the contract.
All bidder inquiries about the meaning or intent of the Contract Documents submitted to the Engineer shall be in writing. Replies to the inquiries will be in the form of addenda and will be mailed, faxed, e-mailed, posted on Monterey County Web Site or delivered to all parties recorded by the Engineer as having received the bidding documents. Issued addenda shall be considered as part of the Contract Documents. Bidder inquiries received less than ten (10) days prior to the date of bid opening may not be answered. Oral and other interpretations or clarifications will be without legal effect.

The County assumes no responsibility for conclusions or interpretations made by a bidder or contractor based on the information or data made available by the County. The County does not assume responsibility for representation made by its officers or agents before the execution of the contract concerning surface or subsurface conditions, unless that representation is expressly stated in the contract.

No conclusions or interpretations made by a bidder or contractor from the information and data made available by the County will relieve a bidder or contractor from properly fulfilling the terms of the Contract.
SECTION 3 - AWARD AND EXECUTION OF CONTRACT

3-1.01 GENERAL:

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions for the requirements and conditions concerning award and execution of contract.

Bidders who wish to lodge a protest as to the award of the bid must do so before 5 p.m. of the 5th business day following the notice of intent to award the contract. Failure to timely file a written protest shall constitute a waiver of right to protest. Untimely protests will not be accepted or considered. Bid protests must be submitted, in writing, to: MONTEREY COUNTY DEPARTMENT OF PUBLIC WORKS TO THE ATTENTION OF THE PROJECT MANAGER/ 168 W. ALISAL ST., FL2/SALINAS CA 93901-2438. Protests may be hand-delivered or sent via facsimile [(831) 755-4958], certified postal mail, or E-mail to the attention of the project manager [The Project Manager’s E-mail address may be obtained by calling (831) 755-4800]. Bid protests must include the project name and project number, a complete statement describing the basis for the bid protest, including a detailed statement of all legal and factual grounds for the protest, any documentation supporting the protestor’s grounds for the protest must also include their contact information including mailing address, telephone number, and E-mail address.

If a valid protest is timely filled, the Department shall investigate the bid protest. The protested bidder shall have three (3) business days to respond to any Department of Public Works requests to provide additional information. The Department shall respond to the protesting party, stating its finding. The Department Director shall make a recommendation to the Board regarding the bid protest.

3-1.02 AWARD OF CONTRACT:

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose bid complies with all the requirements prescribed.

All bids will be compared on the basis of the Engineer’s Estimate of the quantities of work to be done.

In determining the lowest “responsible” Bidder, consideration shall be given to the general competency of Bidder in regards to the work covered by the bid.

Such award, if made, will be made within forty five (45) days after the opening of the bids. This period will be subject to extension for such further period as may be agreed upon in writing between the Department and the bidder concerned.

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds and insurance certificates, to the MONTEREY COUNTY DEPARTMENT OF PUBLIC WORKS so that it is received within 10 days, not including Saturdays, Sundays, and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the bid guaranty.
The executed contract documents shall be delivered to the following address:

MONTEREY COUNTY DEPARTMENT OF PUBLIC WORKS, 168 W. ALISAL ST, 2ND FL, SALINAS, CA, 93901-2438.

3-1.03 DBE AND UDBE FORMS:

A “Local Agency Bidder – DBE Information (Construction Contracts), Exhibit 15-G(2)” form is included in the Bid book to be executed by the successful bidder. The purpose of the form is to collect data required under 49 CFR 26. Even if no DBE participation will be reported, the successful bidder must execute and return the form.

The successful bidder’s “Local Agency Bidder – Information (Construction Contracts), Exhibit 15-G(2)” form should include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each, and the dollar value of each DBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A successful bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies.

The successful bidder is encouraged to provide written confirmation from each DBE that the DBE is participating in the contract. A copy of a DBE’s quote will serve as written confirmation that the DBE is participating in the contract. If a DBE is participating as a joint venture partner, the successful bidder is encouraged to submit a copy of the joint venture agreement.

The “Local Agency Bidder – DBE Information (Construction Contracts), Exhibit 15-G(2)” form shall be completed and returned to the Agency by the successful bidder with the executed contract and contract bonds.

Exhibit 15-G(1), UDBE Commitment Form, and Exhibit 15-H, UDBE Good Faith Efforts must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening. Exhibit 15-G(2), DBE Information, will only be collected from the successful bidder. If the bidder does not comply with Section 2-1.04 Disadvantaged Business Enterprise of these Special Provisions, the County finds your bid nonresponsive.

3-1.04 CONTRACT BONDS (PUB. CONT. CODE 10221 AND 10222):

Reference is made to Section 3-1.03, “Contract Bonds,” of the Standard Specifications with Amendment issue date 11-30-10 and these Special Provisions.

The County furnishes the bidder with the Payment bond and Performance bond forms. The two bonds shall be written by an admitted corporate surety.

In lieu of the second paragraph in Section 3-1.03, “Contract Bonds,” of the Standard Specifications with Amendments issue date 11-30-10, the following shall be inserted:

2. Performance bond to guarantee the faithful performance of the contract. This bond must be equal to at least 100 percent of the total bid.
SECTION 4 - PROSECUTION AND PROGRESS

The Bidder's attention is directed to Section 8, "Prosecution and Progress," of the Standard Specifications with Amendments issue date 11-30-10. Particular attention is directed to the provisions below and in Sections 8-1.03, "Beginning of Work," 8-1.06, "Time of Completion," and 8-1.07, "Liquidated Damages," of the Standard Specifications with issue date 11-30-10.

4-1.01 PRE-CONSTRUCTION CONFERENCE:

After the issuance of the Notice to Proceed, a pre-construction conference shall be held at the office of the Monterey County Department of Public Works, Construction Office, 855 E. Laurel Building “D”, Salinas, California, for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, materials to be ordered, equipment to be used, labor compliance, and all essential matters pertaining to the prosecution of and the satisfactory completion of the Project as required. The Contractor's representatives at this conference shall include all major superintendents for the work and may include major sub-contractors. Representatives of the utility companies that have facilities within the Project site will be in attendance.

4-1.02 SCHEDULING CONFERENCE:

Prior to the beginning of construction the County will conduct with the Contractor a scheduling conference with the Contractor's project manager and construction scheduler. At this meeting the Contractor shall provide a proposed schedule of construction activities for discussion with the Engineer and the Engineer will review the requirements of this section of the Special Provisions with the Contractor.

The Contractor shall submit a general time-scaled logic diagram displaying the major activities and sequence of planned operations and shall be prepared to discuss the proposed work plan and schedule methodology that comply with the requirements of these Special Provisions. If the Contractor proposes deviations to the construction staging of the project, then the general time-scaled logic diagram shall also display the deviations and resulting time impacts. The Contractor shall be prepared to discuss the proposal.

At this meeting, the Contractor shall additionally submit the alphanumeric coding structure and the activity identification system for labeling the work activities. To easily identify relationships, each activity description shall indicate its associated scope or location of work by including such terms as quantity of material, type of work, bridge number, station to station location, side of highway (such as left, right, northbound, southbound), lane number, shoulder, etc.

The Engineer will review the logic diagram, coding structure, and activity identification system, and provide any required baseline schedule changes to the Contractor for implementation.

4-1.03 BEGINNING OF WORK:

In accordance with Section 8-1.03, "Beginning of Work," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions. The Contractor shall begin work within fifteen (15) calendar days of the issuance of Notice to Proceed by the County of Monterey.
4-1.04 TIME OF COMPLETION:

Attention is directed to the provisions in Section 8-1.06, “Time of Completion,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

The work shall be diligently pursued to completion of the contract by the Contractor before the expiration of

**300 Working Days**

beginning as indicated in Section 4-1.03 “Beginning of Work” of these Special Provisions.

4-1.05 LIQUIDATED DAMAGES:

Attention is directed to the provisions in Section 8-1.07, “Liquidated Damages,” of the Standard Specifications dated May 2006 with Amendments issue date 11-30-10 and these Special Provisions.

The Contractor shall pay the County of Monterey the sum of **Three Thousand Dollars ($3,000)** per day for each and every calendar day’s delay in finishing the work in excess of the number of working days prescribed above.

4-1.06 WORKING PERIOD RESTRICTIONS

Attention is directed to the Army Corp of Engineers, California Regional Water Quality Control Board, California Department of Fish and Game and NOAA Fisheries and the avoidance and Minimization Measures of the Natural Environmental Study (NES) and other permits that limit the days construction activities are allowed in the Carmel River. These permits are attached in Section 11 Permits and Agreements of these Special Provisions. The California Department of Fish and Game and the Army Corps of Engineers Permit restrict work within the streambed to the period of June 1 through October 31. The Contractor will be held liable for all damages, fines and assessments incurred in these agreements. In no case shall construction activities within the riverbed, or construction activities that would result in construction in the active streambed occur prior to June 1.

4-1.07 ARCHAEOLOGICAL DISCOVERIES:

Attention is directed to the provisions in Section 14-2.02 “Archaeological Resources” of the Standard Specifications with Amendments issue date 11-30-10.

All articles of archaeological interest that may be uncovered by the Contractor during the progress of the work shall be reported immediately to the Engineer. If cultural material is encountered during project construction, work shall cease until a qualified archeologist can assess the unanticipated discovery in accordance with 36 CFR 800. The Caltrans District 5 Environmental branch shall be notified. The further operations of the Contractor with respect to the find will be decided under the direction of the Engineer.

4-1.08 CLAIMS FOR INCREASES IN COSTS:

During the life of the contract, the County will not accept any claim for any increases in the costs of labor, materials, fuels, shipping, insurances, delivery or any other costs increases. By signing the contract, the contractor agrees to complete the project as shown on the project plans and as specified in the special provisions at the prices listed in the bid proposal.
SECTION 5 - GENERAL

SECTION 5-1 – MISCELLANEOUS

5-1.01 LABOR NONDISCRIMINATION:

Attention is directed to the following notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations:

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM
(GOV. CODE, SECTION 12990)

Attention is directed to the "Nondiscrimination Clause," set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt state contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt state construction contracts and subcontracts of $5,000 or more.

5-1.02 GENERAL PREVAILING WAGE:

Attention is directed to Section 7-1.01A(2), “Prevailing Wage,” of the Standard Specifications with Amendments issue date 11/30/10.

The general prevailing wage rates determined by the Director of Industrial Relations, for the county or counties in which the work is to be done, are available on the Internet at:

http://www.dir.ca.gov/dlsr/pwd/

These wage rates are not included in the Bid book for the project. Changes, if any to the general prevailing wage rates will be available at the same location.

The general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work are on file in the office of the Monterey County Department of Public Works or on the Internet at:

http://www.dir.ca.gov/dlsr/pwd/

The Contractor shall post the prevailing wage rates at the job site.

5-1.03 APPRENTICES:

Attention is directed to Section 7-1.01A(5), "Apprentices," of the Standard Specifications.

The number of federal trainees required for this project is 4 (four).
5-1.04 LABOR CODE REQUIREMENTS:

Attention is directed to Section 7-1.01A(1), "Hours of Labor," of the Standard Specifications with Amendments issue date 11-30-10.

5-1.05 WORKERS' COMPENSATION AND EMPLOYER’S LIABILITY INSURANCE:


5-1.06 INDEMNIFICATION AND INSURANCE:

Attention is directed to Section 7-1.12, “Indemnification and Insurance,” of the Standard Specifications dated May 2006 with Amendments to the Standard Specifications issue date 11-30-10 and these Special Provisions.

In addition to all the requirements listed in Section 7-1.12B(4)(b) “Liability Limits/Additional Insureds” of the Standard Specifications with Amendments issue date 11-30-10, the following additional requirements shall be met. An Additional Insured Endorsement to the Contractor’s Liability insurance policy naming the County of Monterey, their officers, agents, and employees as additional insured’s in the form approved by the County of Monterey shall also be furnished. A copy of the approved endorsement form may be obtained from the County of Monterey at the address to obtain bid packages as shown in the Notice to Bidders. The insurance afforded to the additional insured’s is primary insurance and if the additional insured’s have other insurance that might be applicable to any loss, the amount of this insurance shall not be reduced or prorated due to the existence of such other insurance.

The contractor’s insurer agrees to waive subrogation claims against the County of Monterey, their officers, agents, and employees.

Evidence of insurance (Contractual Liability insurance and Additional Insured Endorsement) in compliance with the requirements herein shall be furnished to the County of Monterey by the Contractor with the Certificate of Insurance in the form as approved by the County of Monterey. A copy of the approved certificate form may be obtained from the County of Monterey at the address to obtain bid packages as shown in the Notice to Bidders. Certificates of insurance shall, without any qualification thereto, contain the following statement:

“Should any of the described policies be canceled, modified, or reduced in limits before the expiration date thereof, the issuing company will mail 30 days' advance written notice to the named certificate holders.”

The insurance shall be issued by a company or companies authorized to transact business in the State of California and shall have a rating of at least A-VII in accordance with the current Best's rating.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor shall it preclude the State of California, County of Monterey from taking such other actions as is available to them under any other provision of this contract (except retainage of money due the Contractor) or otherwise in law.
Prior to the execution of this Agreement by the County, Contractor shall file certificates of insurance with the County Contracts/Purchasing Department and with the County Director of Public Works, showing that the Contractor has in effect the insurance required by this Agreement. The Contractor shall file a new or amended certificate of insurance promptly after any change is made in any insurance policy that would alter the information of the certificate then on file. Acceptance or approval of insurance shall in no way modify or change the indemnification clause in this Agreement, which shall continue in full force and effect.

5-1.07 PUBLIC SAFETY:

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

The Contractor shall install temporary railing (Type K) between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

A. Excavations.—The near edge of the excavation is 12 feet or less from the edge of the lane, except:

1. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.

2. Excavations less than 1 foot deep.

3. Trenches less than 1 foot wide for irrigation pipe or electrical conduit, or excavations less than 1 foot in diameter.

4. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.

5. Excavations in side slopes, where the slope is steeper than 4:1 (horizontal:vertical).

6. Excavations protected by existing barrier or railing.

B. Temporarily Unprotected Permanent Obstacles.—The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.

C. Storage Areas.—Material or equipment is stored within 12 feet of the lane and the storage is not otherwise prohibited by the provisions of the Standard Specifications and these special provisions.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this Section 5-1.02 "Public Safety" of the Special Provisions and in Section 7-1.09, "Public Safety," of the Standard Specifications with Amendment issue date 11-30-10, shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than 1 foot transversely to 10 feet longitudinally with...
respect to the edge of the traffic lane. If the 15 feet minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.08, "Temporary Railing (Type K)," of the Standard Specifications with Amendments issue date 11-30-10. Temporary railing (Type K), conforming to the details shown on 2006 Standard Plan T3, may be used. Temporary railing (Type K) fabricated prior to January 1, 1993, and conforming to 1988 Standard Plan B11-30 may be used, provided the fabrication date is printed on the required Certificate of Compliance.

Temporary railing (Type K) shall be secured in place before starting work for which the temporary railing is required.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of these special provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these special provisions:

<table>
<thead>
<tr>
<th>Approach Speed of Public Traffic (Posted Limit) (Miles Per Hour)</th>
<th>Work Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 45 Miles Per Hour</td>
<td>Within 6 feet of a traffic lane but not on a traffic lane</td>
</tr>
<tr>
<td>35 to 45 Miles Per Hour</td>
<td>Within 3 feet of a traffic lane but not on a traffic lane</td>
</tr>
</tbody>
</table>

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

Full compensation for conforming to the provisions in this section "Public Safety," including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.
5-1.08 TRENCH EXCAVATION SAFETY PLANS:

Attention is directed to Section 5-1.02A, "Trench Excavation Safety Plans," of the Standard Specifications.

5-1.09 GUARANTEE

5-1.09A GENERAL

The Contractor shall guarantee the work is in accordance with contract requirements and remains free from substantial defects in materials and workmanship for a period of one year after contract acceptance. For certain portions of the work where the Director relieves the Contractor of responsibility in accordance with Section 7-1.15, "Relief from Maintenance and Responsibility," of the Standard Specifications, the guarantee period starts on the relief date and ends one year there from.

Substantial defects in materials and workmanship means defective work objectively manifested by damaged, displaced, or missing parts or components and workmanship resulting in improper function of materials, components, equipment, or systems, as installed or manufactured by the Contractor, subcontractor, supplier, or manufacturer.

During the guarantee period, the Contractor shall repair or replace contract work and associated work which is not in accordance with contract requirements or has substantial defects in materials and workmanship. The Contractor shall perform the corrective work with no expense to the Department other than State-provided field inspection services.

The guarantee of work excludes damage or displacement that is outside the control of the Contractor and caused by normal wear and tear, improper operation, insufficient maintenance, abuse, unauthorized modification, or natural disaster as described in Section 7-1.165, "Damage by Storm, Flood, Tsunami or Earthquake," of the Standard Specifications.

The Contractor shall have the same insurance coverage during corrective work operations as prior to contract acceptance, in accordance with Section 7-1.12, "Indemnification and Insurance," of the Standard Specifications with Amendments issue date 11-30-10.

The contract bonds furnished in accordance with Section 3-1.02, "Contract Bonds," of the Standard Specifications must remain in full force and effect during the guarantee period and until all corrective work is complete.

In the case of conflict between this guarantee provision and any warranty provision included in the contract, the warranty provision shall govern for the specific construction product or feature covered.

5-1.09B CORRECTIVE WORK

During the guarantee period, the Department will monitor performance of the highway facilities completed by the Contractor and will perform a thorough review of the contract work at least 60 days before the expiration of the one-year guarantee.

If the Engineer discovers contract work not in compliance with contract requirements or that has substantial defects in materials and workmanship, at any time during the guarantee period, a list of items that require corrective work will be developed and forwarded to the Contractor. Within 15 days of
receipt of a list, the Contractor shall submit to the Engineer a detailed plan for performing corrective work. The work plan shall include a start to finish schedule. It shall include a list of labor, equipment, materials, and any special services intended to be used. It shall clearly show related work including traffic control, temporary delineation, and permanent delineation.

The Contractor shall start the corrective and related work within 15 days of receiving notice from the Engineer that the Contractor’s work plan is approved. The corrective work shall be diligently prosecuted and completed within the time allotted in the approved work plan.

If the Engineer determines that corrective work, covered by the guarantee, is urgently needed to prevent injury or property damage, the Engineer will give the Contractor a request to start emergency repair work and a list of items that require repair work. The Contractor shall mobilize within 24 hours and diligently perform emergency repair work on the damaged highway facilities. The Contractor shall submit a work plan within 5 days of starting emergency repair work.

If the Contractor fails to commence and execute, with due diligence, corrective work and related work required under the guarantee in the time allotted, the Engineer may proceed to have the work performed by County forces or other forces at the Contractor’s expense. Upon demand, the Contractor shall pay all costs incurred by the Department for work performed by County forces or other forces including labor, equipment, material, and special services.

5-1.09C PAYMENT
Full compensation for performing corrective work; and related work such as traffic control, temporary delineation, and permanent delineation, and to maintain insurance coverage and bonds, shall be considered as included in the contract prices paid for the various contract items of work and no separate payment will be made therefor.

5-1.10 BUY AMERICA REQUIREMENTS:

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) Sections 1041(a) and 1048(a), and the regulations adopted pursuant thereto. In conformance with the law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States; with the exception that pig iron and processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and other coating that protects or enhances the value of steel or iron materials shall be considered a manufacturing process subject to the "Buy America" requirements.

A Certificate of Compliance, conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications, shall be furnished for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall specifically certify that all manufacturing processes for the materials occurred in the United States, except for the above exceptions.

The requirements imposed by the law and regulations do not prevent a minimal use of foreign steel and iron materials if the total combined cost of the materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or $2,500, whichever is greater. The Contractor shall
furnish the Engineer acceptable documentation of the quantity and value of the foreign steel and iron prior to incorporating the materials into the work.

5-1.11 SUBCONTRACTOR AND DBE RECORDS:

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First Tier Subcontractors" Form CEM-2402(F) and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer. The form shall be furnished to the Engineer within 90 days from the date of Contract acceptance. The amount of $10,000 will be withheld from payment until a satisfactory form is submitted. The amount will be returned to the Contractor when a satisfactory Form CEM-2402 (F) is submitted.

Prior to the fifteenth of each month, the Contractor shall submit documentation to the Engineer showing the amount paid to DBE trucking companies. This monthly documentation shall indicate the portion of the revenue paid to DBE trucking companies. The Contractor shall also obtain and submit documentation to the Engineer showing the amount paid by DBE trucking companies to all firms, including owner-operators, for the leasing of trucks. If the DBE leases trucks from a non-DBE, the Contractor may count only the fee or commission the DBE receives as a result of the lease arrangement.

The Contractor shall also obtain and submit documentation to the Engineer showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month. This documentation shall be submitted on "Monthly DBE Trucking Verification" Form CEM-2404(F).

5-1.12 DBE CERTIFICATION STATUS:

If a DBE subcontractor is decertified during the life of the Project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the Project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract, "Disadvantaged Business Enterprises (DBE) Certification Status Change" Form CEM-2403(F) indicating the DBEs' existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer within ninty (90) days from the date of contract acceptance.

The “DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE” form is included in Section 14 of these Special Provisions.

5-1.13 PERFORMANCE OF SUBCONTRACTORS:

The subcontractors listed by you in the “Bid Forms Book Two” shall list therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of the total bid or $10,000, whichever is greater, in
accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder’s attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

UDBEs must perform work or supply materials as listed in the “Local Agency Bidder – UDBE Commitment” form specified under Section 2, “Bidding,” of these special provisions. Do not terminate a UDBE listed subcontractor for convenience and perform the work with your own forces or obtain materials from other sources without prior written authorization from the Agency.

The Agency grants authorization to use other forces or sources of materials for requests that show any of the following justifications:

1. Listed UDBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. You stipulate a bond is a condition of executing the subcontract and the listed UDBE fails to meet your bond requirements.
3. Work requires a contractors license and listed UDBE does not have a valid licence under Contractors License Law.
4. Listed UDBE fails or refuses to perform the work or furnish the listed materials.
5. Listed UDBE’s work is unsatisfactory and not in compliance with the contract.
6. Listed UDBE delays or disrupts the progress of the work.
7. Listed UDBE becomes bankrupt or insolvent.

If a listed UDBE subcontractor is terminated, you must make good faith efforts to find another UDBE subcontractor to substitute for the original UDBE. The substitute UDBE must perform at least the same amount of work as the original UDBE under the contract to the extent needed to meet the UDBE goal.

The substitute UDBE must be certified as a DBE at the time of request for substitution.

The Agency does not pay for work or material unless it is performed or supplied by the listed UDBE, unless the UDBE is terminated in accordance with this section.

5.1.14 CONTRACTOR’S LICENSING LAWS:

Attention is directed to Section 7-1.01C, "Contractor's Licensing Laws," of the Standard Specifications with Amendments issue date 11-30-10.

5.1.15 SUBCONTRACTING:

Attention is directed to the provisions in Section 8, "Prosecution and Progress," of the Standard Specifications with Amendments issue date 11-30-10, and Section 2, “Proposal Requirements and Conditions,” and Section 3, “Contract Award and Execution,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

Pursuant to the provisions in Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works Project. This list of debarred contractors is available from the Department of Industrial Relations web site at:
http://www.dir.ca.gov/DLSE/Debar.html.

The provisions in the third paragraph of Section 8-1.01, "Subcontracting," of the Standard Specifications, that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original contract price, is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these Special Provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these Special Provisions. This requirement shall be enforced as follows:

A. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

In conformance with the Federal DBE regulations Sections 26.53(f)(1) and 26.53(f)(2) Part 26, Title 49 CFR:

A. The Contractor shall not terminate for convenience a DBE subcontractor listed in response to Section 2-1.02B, "Submission of DBE Information," and then perform that work with its own forces, or those of an affiliate without the written consent of the Department, and

B. If a DBE subcontractor is terminated or fails to complete its work for any reason, the Contractor will be required to make good faith efforts to substitute another DBE subcontractor for the original DBE subcontractor, to the extent needed to meet the contract goal.

The requirement in Section 2-1.02, "Disadvantaged Business Enterprise (DBE)," of these special provisions that DBEs must be certified on the date bids are opened does not apply to DBE substitutions after award of the contract.

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Pub Cont Code § 4100 et seq., Monterey County may exercise the remedies provided under Pub Cont Code §4110. Monterey County may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

The Contractor shall perform work equaling at least 30 percent of the value of the original total bid with the Contractor's own employees and equipment, owned or rented, with or without operators.

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).
Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations’ Web site.

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

Each subcontract and any lower tier subcontract that may in turn be made shall include the “Required Contract Provisions Federal-Aid Construction Contracts” in Section 14 of these special provisions. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

5-1.16 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS:

A prime contractor or subcontractor shall pay any subcontractor not later than ten (10) days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The ten (10) days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over thirty (30) days may take place only for good cause and with the County’s prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanctions, and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE subcontractors.

5-1.17 PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS:

No retainage will be withheld by the agency from progress payments due the prime contractor. Retainage by the prime contractor or subcontractors is prohibited and no retainage will be held by the prime contractor from progress due subcontractors. Any violation of this provision shall subject the violating prime contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime Contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor or deficient subcontract performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime contractors and subcontractors. Attention is also directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code concerning prompt payment to subcontractors.

5-1.17A RECORDS

The Contractor shall maintain cost accounting records for the contract pertaining to, and in such a manner as to provide a clear distinction between, the following 6 categories of costs of work during the life of the contract:

A. Direct costs of contract item work.
B. Direct costs of changes in character in conformance with Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications.

C. Direct costs of extra work in conformance with Section 4-1.03D, "Extra Work," of the Standard Specifications.

D. Direct costs of work not required by the contract and performed for others.

E. Direct costs of work performed under a notice of potential claim in conformance with the provisions in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications.

F. Indirect costs of overhead.

Cost accounting records shall include the information specified for daily extra work reports in Section 9-1.03, "Force Account Payment," of the Standard Specifications with Amendments issue date 11-30-10. The requirements for furnishing the Engineer completed daily extra work reports shall only apply to work paid for on a force account basis.

The cost accounting records for the contract shall be maintained separately from other contracts, during the life of the contract, and for a period of not less than three (3) years after the date of acceptance of the contract. If the Contractor intends to file claims against the Department, the Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

5-1.17B PARTNERING:

The County of Monterey will promote the formation of a “Partnering” relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship will be to maintain cooperative communication and mutually resolve conflicts at the lowest possible management level.

The Contractor may request the formation of such a “Partnering” relationship by submitting a request in writing to the Engineer after approval of the contract. If the Contractor’s request for “Partnering” is approved by the Engineer, scheduling of a “Partnering” workshop, selecting the “Partnering” facilitator and workshop site, and other administrative details shall be as agreed to by both parties.

The costs involved in providing a facilitator and a workshop site will be borne equally by the County and the Contractor. The Contractor shall pay all compensation for the wages and expenses of the facilitator, and of the expenses for obtaining the workshop site. The County’s share of such costs will be reimbursed to the Contractor in a change order written by the Engineer. Markups will not be added. All other costs associated with the “Partnering” relationship will be borne separately by the party incurring the costs.

The establishment of a “Partnering” relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.
5-1.18 PAYMENTS:

Attention is directed to Section 9-1.07, “Progress Payments,” and Section 9-1.08, “Payment After Contract Acceptance”, of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

For the purpose of making partial payments pursuant to Section 9-1.07, “Progress Payments,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions, the amount set forth for the contract items of work hereinafter listed shall be deemed to be the maximum value of the contract item of work, which will be recognized for progress payment purposes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Schedule (Critical Path)</td>
<td>$5,000</td>
</tr>
<tr>
<td>Clearing and Grubbing</td>
<td>$20,000</td>
</tr>
<tr>
<td>Develop Water Supply</td>
<td>$10,000</td>
</tr>
<tr>
<td>Bridge Removal (Portion)</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

After acceptance of the contract pursuant to Section 7-1.17, "Acceptance of Contract," of the Standard Specifications with Amendments issue date 11-30-10, the amount, if any, payable for a contract item of work in excess of the maximum value for progress payment purposes herein above listed for said item, will be included for payment in the first estimate made after acceptance of the contract.

No partial payment will be made for any materials on hand which are furnished but not incorporated in the work.

In determining the partial payments to be made to the Contractor, only the following listed materials shall be considered for inclusion in said payment as materials furnished but not incorporated in the work:

Steel Piling and Shells
Prestressing Steel and Ducts
Bar Reinforcing Steel
Joint Seal Assembly
Welded Steel Casing
PVC Conduit
Rock Slope Protection Fabric
Pedestrian Railing
Metal Tube Bridge Railing
Miscellaneous Metal (Bridge)
Pavement Markers

5-1.19 MEASUREMENT AND PAYMENT:

Attention is directed to Section 9, “Measurement and Payment,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

5-1.20 PROCEDURES TO RESOLVE CLAIMS:

Section 9-1.10, "Arbitration," as defined in the Standard Specifications with Amendments issue date 11-30-10, is deleted from this contract. In lieu of arbitration, the following shall apply (from the Public Contract Code):
A. Application of article; inclusion of article in plans and specifications (Public Contracts Codes 20104):

1. This article applies to all public works claims of three hundred seventy-five thousand dollars ($375,000) or less which arise between a Contractor and the County of Monterey.

2. This article shall not apply to any claims resulting from a contract between the Contractor and the County of Monterey when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, of the Public Contract Code.

   a. "Public Works" has the same meaning as in Sections 3100 and 3106 of the Civil Code.

   b. "Claim" means a separate demand by the Contractor for (A) a time extension, (B) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

3. The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work, which may give, rise to a claim under this article.

4. This article applies only to contracts entered into on or after January 1, 1991.

B. Claims; requirements (Public Contracts Codes 20104.2):

For any claim subject to this article, the following requirements apply:

1. The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersed notice requirements otherwise provided by contract for the filing of claims.

2. For Claims of less than fifty thousand dollars ($50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the local agency may have against the claimant.

   a. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

   b. The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further
documentation or within a period of time no greater than that taken by the 
claimant in producing the additional information, whichever is greater.

3. For claims of over fifty thousand dollars ($50,000) and less than or equal to three 
hundred seventy-five thousand dollars ($375,000), the local agency shall respond in 
writing to all written claims within sixty (60) days of receipt of the claim, or may 
request, in writing, within thirty (30) days of receipt of the claim, any additional 
documentation supporting the claim or relating to defenses or claims the local agency 
may have against the claimant.

   a. If additional information is thereafter required, it shall be requested and 
      provided pursuant to this subdivision, upon mutual agreement of the local 
      agency and the claimant.

   b. The local agency's written response to the claim, as further documented, shall 
      be submitted to the claimant within 30 days after receipt of the further 
documentation, or within a period of time no greater than that taken by the 
claimant in producing the additional information or requested documentation, 
whichver is greater.

4. If the claimant disputes the local agency's written response, or the local agency fails to 
respond within the time prescribed, the claimant may so notify the local agency, in 
writing, either within fifteen (15) days of receipt of the local agency's response or 
within fifteen (15) days of the local agency's failure to respond within the time 
prescribed, respectively, and demand an informal conference to meet and confer for 
settlement of the issues in dispute. Upon a demand, the local agency shall schedule a 
meet and confer conference within thirty (30) days for settlement of the dispute.

5. If following the meet and confer conference the claim or any portion remains in 
dispute, the claimant may file a claim pursuant to Chapter 1 (commencing with 
Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 
of Title 1 of the Government Code. For purposes of those provisions, the running of 
the period of time within which a claim must be filed shall be tolled from the time the 
claimant submits his or her written claim pursuant to subdivision (a) until the time the 
claim is denied, including any period of time utilized by the meet and confer 
conference.

C. Procedures for civil actions filed to resolve claims (Public Contracts Codes 20104.4).

The following procedures are established for all civil actions filed to resolve claims 
subject to this article:

1. Within 60 days, but no earlier than 30 days, following the filing or responsive 
pleadings, the court shall submit the matter to nonbinding mediation unless waived by 
mutual stipulation of both parties. The mediation process shall provide for the selection 
within 15 days by both parties of a disinterested third person as mediator, shall be 
commenced within 30 days of the submittal, and shall be concluded within 15 days
from the commencement of the mediation unless a time requirement is extended upon a
good cause showing to the court.

2. If the matter remains in dispute, the case shall be submitted to judicial arbitration
pursuant to Chapter 2.5 (commencing with Section 1141.10) Title 3 of Part 3 of the
Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil
Discovery Act of 1986 Article 3 (commencing with Section 2016) of Chapter 3 of Title
3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under
this subdivision consistent with the rules pertaining to judicial arbitration.

a. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of
Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be
experienced in construction law, and (B) any party appealing an arbitration
award who does not obtain a more favorable judgment shall, in addition to
payment of costs and fees under that chapter, also pay the attorney's fees on
appeal of the other party.

D. Payment by local agency of undisputed portion of claim; interest on arbitration
award or judgment (Public Contracts Codes 2104.6):

1. The County of Monterey shall not fail to pay money as to any portion of a claim that is
undisputed except as otherwise provided in the contract.

2. In any suit filed under Section 20104.4, County of Monterey shall pay interest at the
legal rate on any arbitration award or judgment. The interest shall begin to accrue the
date the suit is filed in a court of law.

5-1.21 FINAL PAY QUANTITIES:
Attention is directed to Section 9-1.01C, "Final Pay Items," of the Standard Specifications with
Amendments issue date 11-30-10.

5-1.22 INTEREST ON PAYMENTS:
Interest shall be payable on progress payments, payments after acceptance, final payments, extra
work payments, and claim payments as follows:

A. Unpaid progress payments, payment after acceptance, and final payments shall begin to accrue
interest 30 days after the Engineer prepares the payment estimate.

B. Unpaid extra work bills shall begin to accrue interest 30 days after preparation of the first pay
estimate following receipt of a properly submitted and undisputed extra work bill. To be
properly submitted, the bill must be submitted within 7 days of the performance of the extra work
and in conformance with the provisions in Section 9-1.03, "Force Account Payment," and
Section 9-1.07, "Progress Payments," of the Standard Specifications with Amendments issue date
11-30-10. An undisputed extra work bill not submitted within 7 days of performance of the extra
work will begin to accrue interest 30 days after the preparation of the second pay estimate
following submittal of the bill.
C. The rate of interest payable for unpaid progress payments, payments after acceptance, final payments, and extra work payments shall be 10 percent per annum.

D. The rate of interest payable on a claim, protest or dispute ultimately allowed under this contract shall be 6 percent per annum. Interest shall begin to accrue 61 days after the Contractor submits to the Engineer information in sufficient detail to enable the Engineer to ascertain the basis and amount of said claim, protest or dispute.

The rate of interest payable on any award in arbitration shall be 6 percent per annum if allowed under the provisions of Civil Code Section 3289.

5-1.23 ASSIGNMENT OF ANTITRUST ACTIONS:
The Contractor's attention is directed to the following provision, Public Contract Code Section 7103.5, which shall be applicable to the Contractor and his Subcontractors:

"In entering into a public works Contract or a Subcontract to supply goods, services, or materials pursuant to a public works Contract, the Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works Contract or the Subcontract. This assignment shall be made and become effective at time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties."

5-1.24 TESTING:
Testing of materials and work shall conform to the provisions in Section 6-3, "Testing," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions. Whenever the provisions of Section 6-3.01, "General," of the Standard Specifications with Amendments issue date 11-30-10 refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work.

The Engineer will deduct the costs for testing of materials and work found to be unacceptable, as determined by the tests performed by the Department, and the costs for testing of material sources identified by the Contractor which are not used for the work, from moneys due or to become due to the Contractor. The amount deducted will be determined by the Engineer.

5-1.25 COST REDUCTION INCENTIVE:
Attention is directed to Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications with Amendments issue date 11-30-10.

Prior to preparing a written cost reduction proposal, the Contractor shall request a meeting with the Engineer to discuss the proposal in concept. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, peer reviews, overall merit of the proposal, and review times required by the Department and other agencies.

If a cost reduction proposal submitted by the Contractor, and subsequently approved by the
Engineer, provides for a reduction in contract time, 50 percent of that contract time reduction shall be credited to the State by reducing the contract working days, not including plant establishment. Attention is directed to "Beginning of Work", "Time of Completion" and "Liquidated Damages" of these special provisions regarding the working days.

If a cost reduction proposal submitted by the Contractor, and subsequently approved by the Engineer, provides for a reduction in traffic congestion or avoids traffic congestion during construction, 60 percent of the estimated net savings in construction costs attributable to the cost reduction proposal will be paid to the Contractor. In addition to the requirements in Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications with issue date 11-30-10, the Contractor shall provide detailed comparisons of the traffic handling between the existing contract and the proposed change, and estimates of the traffic volumes and congestion.

5-1.26 DAMAGE CLAIMS:

Attention is directed to Section 7, "Legal Relations and Responsibility," of the Standard Specifications with Amendments issue date 11-30-10.

5-1.27 NOTICE OF POTENTIAL CLAIM:

Attention is directed to Section 9-1.08D, "Final Payment and Claims," of the Standard Specifications with Amendments issue date 11-30-10.

5-1.28 FINAL PAYMENT AND CLAIMS:

Attention is directed to Section 9-1.08D, "Final Payment and Claims," of the Standard Specifications with Amendments issue date 11-30-10.

5-1.29 PAYROLL RECORDS:

The Contractor's attention is directed to Section 7-1.01A(3), "Payroll Records," of the Standard Specifications with Amendments issue date 11-30-10, and to the provisions of Labor Code, Section 1776 (Stats. 1978, Chapter 1249). The Contractor shall be responsible for the compliance with these provisions by his or her Subcontractors. The Contractor shall furnish the Engineer with certified payrolls and statement of benefits.

5-1.30 SURFACE MINING AND RECLAMATION ACT:

Attention is directed to the Surface Mining and Reclamation Act of 1975, commencing in Public Resources Code, Mining and Geology, Section 2710, which establishes regulations pertinent to surface mining operations.

Construction materials such as aggregate, sand, gravel, crushed stone, road base, fill materials and any other mineral materials supplied for use in public works construction Project or maintenance which are from California mining operations shall be subject to the requirements of the Surface Mining and Reclamation Act of 1975 (SMARA). Contractor shall only acquire these materials from the surface mine operators who are identified on the AB 3098 List. The AB 3098 List is maintained by the Department of Conservation’s Office of Mine Reclamation (OMR) and can be viewed at the OMR website: www.conservation.ca.gov/OMR/ab3098-list/index.htm. To confirm whether or not a specific operator is on or off the list, please call OMR at (916) 323-9198. Failure to comply with this requirement shall constitute as a non-compliance to the contract requirements and shall be subject to rejection of bid by the Owner or penalty as imposed by law.
The requirements of this section shall apply to all materials furnished for the Project, except for acquisition of materials in conformance with Section 4-1.05, "Use of Materials Found on the Work," of the Standard Specifications.

5-1.31 PROJECT APPEARANCE:

The Contractor shall maintain a neat appearance to the work.

In any area visible to the public, the following shall apply:

A. When practicable, broken concrete and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of weekly.

B. The Contractor shall furnish trash bins for all debris from structure construction. All debris shall be placed in trash bins daily. Forms or false work that are to be re-used shall be stacked neatly concurrently with their removal. Forms and false work that are not to be re-used shall be disposed of concurrently with their removal.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.32 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES:

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications, and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, all such removal of asbestos or hazardous substances including any exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area due to the presence of asbestos or hazardous substances, delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.09, "Delays," of the Standard Specifications with Amendments issue date 11-30-10.

The Department reserves the right to use other forces for exploratory work to identify and determine the extent of such material and for removing hazardous material from such area.

5-1.33 DIFFERING SITE CONDITIONS:

Attention is directed to Section 5-1.116, "Differing Site Conditions," of the Standard Specifications with Amendments issue date 11-30-10.
During the progress of the work, if subsurface or latent conditions are encountered at the site differing materially form those indicated in the "Materials Information," log of test borings, other geotechnical data obtained by the Department's investigation of subsurface conditions, or an examination of the conditions above ground at the site, the party discovering those conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

The Contractor will be allowed 15 days from the notification of the Engineer's determination of whether or not an adjustment of the contract is warranted, in which to file a notice of potential claim in conformance with the provisions of Section 9-1.08D, "Final Payment and Claims," of the Standard Specifications with Amendments issue date 11-30-10 and as specified herein; otherwise the decision of the Engineer shall be deemed to have been accepted by the Contractor as correct. The notice of potential claim shall set forth in what respects the Contractor's position differs from the Engineer's determination and provide any additional information obtained by the Contractor, including but not limited to additional geotechnical data. The notice of potential claim shall be accompanied by the Contractor's certification that the following were made in preparation of the bid: a review of the contract, a review of the "Materials Information," a review of the log of test borings and other records of geotechnical data to the extent they were made available to bidders prior to the opening of bids, and an examination of the conditions above ground at the site. Supplementary information, obtained by the Contractor subsequent to the filing of the notice of potential claim, shall be submitted to the Engineer in an expeditious manner.

5-1.34 AREAS FOR CONTRACTOR'S USE:

Attention is directed to the requirements specified in Section 7-1.19, "Rights in Land and Improvements," of the Standard Specifications and these Special Provisions.

The highway right of way shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the right of way, or allow others to occupy the right of way, for purposes that are not necessary to perform the required work.

Areas available for the exclusive use of the Contractor are designated on the plans. The Contractor shall secure at his or her own expense any area required beyond the Project site for plant sites, storage of equipment or materials, or for other purposes. Caltrans must be notified prior to construction if the Contractor wishes to use areas outside of the previously reviewed Area of Potential Effect. All areas outside the pre-approved project limits must be evaluated prior to construction.

Use of the Contractor's work areas and other County-owned property shall be at the Contractor's own risk, and the County shall not be held liable for any damage to or loss of materials or equipment located within such areas.

The Contractor shall obtain encroachment permits prior to occupying County-owned parcels outside the Contract limits. The required encroachment permits may be obtained from the Monterey County Department of Public Works, 168 West Alisal Street, 2nd floor, Salinas, California 93901-2438.

Residence trailers shall not be allowed within the highway right of way, except that one trailer will be allowed for yard security purposes.
The Contractor shall remove all equipment, materials, and rubbish from the work areas and other County-owned property, which he or she occupies and shall leave the areas in a presentable condition, in accordance with the provisions in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

The Contractor shall secure at his or her own expense any area required for plant sites, storage of equipment or materials, or for other purposes if sufficient area is not available to him or her within the contract limits, or at the sites designated on the plans outside the contract limits.

Adjacent project property owners have expressed an interest in leasing property to a project contractor. The contractor may contact the Engineer for information concerning the additional adjacent property available for lease. The Contractor may also contact Brian Grosa at (831) 594-1131 and Jeff Workman at (831) 596-6164 for information.

5-1.35 ARCHAEOLOGICAL DISCOVERIES:

If archaeological materials, including but not limited to human skeletal material and disarticulated human bone, are discovered at the job site, protect and leave undisturbed and in place archaeological materials in accordance with the following codes and these special provisions:

1. California Public Resources Code, Division 5, Chapter 1.7 § 5097.5
2. California Public Resources Code, Division 5, Chapter 1.75 § 5097.98 and § 5097.99
3. California Administrative Code, Title 14 § 4308
4. California Penal Code, Part 1, Title 14 § 622-1/2
5. California Health and Safety Code, Division 7, Part 1, Chapter 2, § 7050.5

Archaeological materials are the physical remains of past human activity and include historic-period archaeological materials and prehistoric Native American archaeological materials. Nonhuman fossils are not considered to be archaeological except when showing direct evidence of human use or alteration or when found in direct physical association with archaeological materials as described in these special provisions.

Historic-period archaeological materials include cultural remains beginning with initial European contact in California, but at least fifty (50) years old. Historical archaeological materials include:

1. Trash deposits or clearly defined disposal pits containing tin cans, bottles, ceramic dishes, or other refuse indicating previous occupation or use of the site
2. Structural remains of stone, brick, concrete, wood, or other building material found above or below ground or
3. Human skeletal remains from the historic period, with or without coffins or caskets, including any associated grave goods

Prehistoric Native American archaeological materials include:

1. Human skeletal remains or associated burial goods such as beads or ornaments
2. Evidence of tool making or hunting such as arrowheads and associated chipping debris of fine-grained materials such as obsidian, chert, or basalt
3. Evidence of plant processing such as pestles, grinding slabs, or stone bowls
4. Evidence of habitation such as cooking pits, stone hearths, packed or burnt earth floors or
5. Remains from food processing such as concentrations of discarded or burnt animal bone, shellfish remains, or burnt rocks used in cooking

Immediately upon discovery of archaeological materials, stop all work within a 60-foot radius of the archaeological materials and immediately notify the Engineer. Archaeological materials found during construction are the property of the State. Do not resume work within the 60-foot radius of the find until the Engineer gives you written approval. If, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of an archeological find or investigation or recovery of archeological materials, you will be compensated for resulting losses and an extension of time will be granted in the same manner as provided for in Section 8-1.09, "Delays," of the Standard Specifications with Amendments issue date 11-30-10.

The Department may use other forces to investigate and recover archaeological materials from the location of the find. When ordered by the Engineer furnish labor, material, tools and equipment, to secure the location of the find, and assist in the investigation or recovery of archaeological materials and the cost will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications with Amendments issue date 11-30-10.

Full compensation for immediately notifying the Engineer upon discovery of archaeological materials and leaving undisturbed and in place archaeological materials discovered on the job site shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

5-1.36 PROJECT INFORMATION:

The information in this section has been compiled specifically for this project and is made available for bidders and Contractors. Other information referenced in the Standard Specifications and these special provisions do not appear in this section. The information is subject to the conditions and limitations set forth in Standard Specifications with Amendments issue date 11-30-10, Section 2-1.03, "Bid Documents," and Section 6-2, "Local Materials." Bidders and Contractors shall be responsible for knowing the procedures for obtaining information.

The County makes the following supplemental project information available:

Log of Test Borings
Foundation Report
State of California, Department of Fish and Game, Permit
State of California, Regional Water Quality Control Board, Certification
United States Army, Corps of Engineers, Permit
Bridge as-built drawings

5-1.37 SOUND CONTROL REQUIREMENTS:

Sound control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.
Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

Noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.38 NOISE AND LAND USE MITIGATION MEASURES:

The Carmel Valley Master Plan and Monterey County General Plan policies related to noise and relevant to the Schulte Road Bridge Replacement project include the following:

22.2.4.1 (CV) Noise generating construction activities should be restricted to the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday, where such noise would impact existing development. All construction equipment utilizing internal combustion engines shall be required to have mufflers which are in good condition.

The following standard noise mitigation measures from the County’s Noise Ordinance shall be implemented to reduce the effects of construction related noise and vibration:

1. Noise generating construction activities shall be confined to between 8:00 a.m. and 5:00 p.m. from Monday to Friday. No construction is permitted on Sundays and federal holidays.

2. Pile driving hours shall be confined to 8:00 a.m. to 5:00 p.m. from Monday to Friday.

3. A notice regarding pile driving activities shall be posted where it is clearly visible to local residences. This notice shall include hours of operations and anticipated duration of pile driving activities.

4. Residents within 1,000 feet of the construction site shall be advised when pile driving is anticipated.

5. Effective mufflers shall be fitted to all internal combustion engines.

6. When practical, temporary portable acoustical barriers shall be provided around the pile driving hammer and pile mechanism.

Land Use Mitigation Measures

1. Locate building materials and construction equipment in a staging area. The staging area shall be located in a place that will have the least effect on the surrounding residential land uses.
2. Construction equipment shall be located within the staging area when not in operation.

3. A perimeter fence that blends with the colors of the natural surroundings will be placed around the staging area.

4. The construction operating hours are from 7:00 a.m. to 5:00 p.m. Monday through Friday per Carmel Valley Master Plan.

5. Pile driving activities will be confined to the hours of 9:00 a.m. to 5:00 p.m. Monday through Friday (per Noise Study).

5-1.39 AIR POLLUTION CONTROL:

Air pollution control shall conform to the provisions in Section 14-9.01, "Air Pollution Control," of the Standard Specifications with Amendments issue date 11=30-10 and these Special Provisions.

Material to be disposed of shall not be burned unless the Contractor has obtained a permit to burn combustible material resulting from clearing and grubbing operations from an air pollution control officer of the local or regional authority. A copy of the permit shall be filed with the Engineer before beginning any burning. All such burning shall be conducted in strict conformance with the provisions stipulated in said permit and at such times and in such manner as to prevent the fire from spreading to areas adjoining the right of way.

In case the burning precedes construction operations, the piles may be placed in the center of the right of way; otherwise, the piles shall be placed in the most convenient location at the side of the right of way and beyond slope lines where they may be burned without damage to the surrounding forest cover or to the adjacent property.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation shall be allowed therefor.

5-1.40 PRESENCE OF LISTED OR SPECIAL STATUS SPECIES:

Various “listed” or “special status” species may occur within the limits of the construction site at different times. The Contractor's attention is drawn to the various permits attached to these Special Provisions. In addition, a Focused Environmental Impact Report / Environmental Assessment was completed by LSA Associates, Inc., a Schulte Road Bridge Replacement Biological Impact Analysis completed by The Habitat Restoration Group, a addendum to the Supplemental Biological Impact Analysis was completed by LSA Associates, Inc. and a Environmental Commitment spreadsheet is available for review by the Contractor by contacting the County of Monterey Public Works Department.

Prior to the start of construction and at various times during construction, the County may conduct biological field surveys within and around the construction site to determine the presence or absence of endangered and special status species. Should the presence of such species be detected, the Engineer may direct the Contractor to stop work and/or take corrective actions. Additionally, the County may undertake actions to remove the species from the site. The Contractor shall cooperate fully with all such directions and actions. If Federally-listed species are found at the sight, the County must contact Caltrans immediately for instruction on how to proceed.
Corrective actions directed by the Engineer, that would not otherwise be required by the project plans, the Standard Specifications, or these Special Provisions, will be paid for as extra work as provided in Section 4-1.03 “Changes” of the Standard Specifications with Amendments issue date 11-30-10.

The Contractor shall immediately notify the Engineer of any delays to the Contractor’s operations as a direct result of direction from the Engineer to stopping work and/or taking corrective actions. At the sole discretion of the Engineer, these delays may be considered right of way delays within the meaning of Section 8-1.09, “Delays,” of the Standard Specifications with Amendments to the Standard Specifications issue date 11-30-10, and if so considered, compensation for the delay will be determined in conformance with the provisions in Section 8-1.09, “Delays.” The Contractor shall be entitled to no other compensation for that delay.

5-1.41 RELATIONS WITH CALIFORNIA DEPARTMENT OF FISH AND GAME:

A portion of this project is located within the jurisdiction of the California Department of Fish and Game. An agreement regarding a stream or lake alteration has been entered into by the County of Monterey and the Department of Fish and Game. The Contractor shall be fully informed of the requirements of this agreement as well as rules, regulations, and conditions that may govern the Contractor's operations in these areas and shall conduct the work accordingly.

A copy of the agreement is include in Section 11, “Permits and Agreements” of these Special Provisions.

It is unlawful for any person to divert, obstruct or change the natural flow of the bed, channel or bank of a stream, river or lake without first notifying the Department of Fish and Game, unless the project or activity is noticed and constructed in conformance with conditions imposed under Fish and Game Code Section 1601.

Attention is directed to Sections 7-1.01, "Laws to be Observed," 7-1.01G, "Water Pollution," and 7-1.12, "Indemnification and Insurance," of the Standard Specifications with Addendum issue date 11-30-10.

Modifications to the agreement between the County of Monterey and the Department of Fish and Game which are proposed by the Contractor shall be submitted in writing to the Engineer for transmittal to the Department of Fish and Game for their consideration.

When the Contractor is notified by the Engineer that a modification to the agreement is under consideration, no work shall be performed which is inconsistent with the original agreement or proposed modification until the departments take action on the proposed modifications. Compensation for delay will be determined in conformance with the provisions in Section 8-1.09, "Delays," of the Standard Specifications with Amendment issue date 11-30-10.

The provisions of this section shall be made a part of every subcontract executed pursuant to this contract.

Modifications to any agreement between the Department of Public Works and the Department of Fish and Game will be fully binding on the Contractor. The provisions of this section shall be made a
part of every subcontract executed pursuant to this contract.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation shall be allowed therefor.

5-1.42 RELATIONS WITH UNITED STATES ARMY CORPS OF ENGINEERS:

A portion of this project is located within waters of the United States under the jurisdiction of the United States Army Corps of Engineers, which has issued a permit for the project. The Contractor shall fully inform himself of all rules, regulations and conditions that may govern his operations in said area and shall conduct his work accordingly.

A copy of the permit is included in Section 11, “Permits and Agreements” of these Special Provisions.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.43 RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD:

The location of the project is within an area controlled by the Regional Water Quality Control Board. Regional Quality Control Board Standard Certification has been issued covering work to be performed under this contract. The Contractor shall fully inform oneself of all rules, regulations and conditions that may govern one’s own operations in said area and shall conduct his work accordingly.

A copy of the “Standard Certification” is included in Section 11, “Permits and Agreements” of these Special Provisions”

The Contractor shall know and comply with provisions of Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.01, "Laws to be Observed," 7-1.11, "Preservation of Property," and 7-1.12, "Indemnification and Insurance," of the Standard Specifications with Amendments issue date 11-30-10.

The Contractor shall be responsible for penalties assessed on the Contractor or the Department as a result of the Contractor's failure to comply with the provisions in "Water Pollution Control" of these special provisions or with the applicable provisions of the Federal, State, and local regulations and requirements.

Penalties as used in this section shall include fines, penalties, and damages, whether proposed, assessed, or levied against the Department or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of applicable laws, regulations, or requirements. Costs incurred could include sums
spent instead of penalties, in mitigation or to remEDIATE or correct violations.

5-1.43A WITHHOLDS:

The Department will withhold money due the Contractor, in an amount estimated by the Department, to include the full amount of penalties and mitigation costs proposed, assessed, or levied as a result of the Contractor's violation of the permits, or Federal or State law, regulations, or requirements. Funds will be withheld by the Department until final disposition of these costs has been made. The Contractor shall remain liable for the full amount until the potential liability is finally resolved with the entity seeking the penalties. Instead of the withhold, the Contractor may provide a suitable bond in favor of the Department to cover the highest estimated liability for any disputed penalties proposed as a result of the Contractor's violation of the permits, law, regulations, or requirements.

If a regulatory agency identifies a failure to comply with the permits and modifications thereto, or other Federal, State, or local requirements, the Department will withhold money due the Contractor, subject to the following:

A. The Department will give the Contractor thirty (30) days notice of the Department's intention to withhold funds from payments which may become due to the Contractor before acceptance of the contract. Funds withheld after acceptance of the contract will be made without prior notice to the Contractor.

B. No withholds of additional amounts out of payments will be made if the amount to be withheld does not exceed the amount being withheld from partial payments in accordance with Section 9-1.06, "Partial Payments," of the Standard Specifications.

C. If the Department has withheld funds and it is subsequently determined that the State is not subject to the entire amount of the costs and liabilities assessed or proposed in connection with the matter for which the withhold was made, the Department will return the excess amount withheld to the Contractor in the progress payment following the determination. If the matter is resolved for less than the amount withheld, the Department will pay interest at a rate of 6 percent per year on the excess withhold.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to water pollution control work. The Contractor and the Department shall provide copies of correspondence, notices of violation, enforcement actions, or proposed fines by regulatory agencies to the requesting regulatory agency.

5-1.44 PREVENTION OF IMPACTS TO STEELHEAD TROUT:

To avoid potential impacts to Steelhead any disturbed riverbed areas shall be restored to pre-project contours. If the river bed is disturbed during the first construction season it shall also be restored to a pre-project contour condition until the next construction season can begin.

No extension of time shall be granted for a suspension of work due to steelhead trout impacts.

Attention is directed to Section 11 “Permits and Agreements” for additional conditions that shall
be included as part of “Prevention of Impacts to Steelhead Trout.”

Full compensation for conforming to the requirements in this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.45 STEELHEAD:

Steelhead are federally listed as a threatened under the Endangered Species Act. Adult steelhead enter the Carmel River from December through April and migrate upstream to spawn. All known spawning sites are located upstream of the Schulte Road Bridge. Juvenile steelhead are found throughout the Carmel River system, including the vicinity of Schulte Road Bridge. Steelhead migrate through the project site to the ocean in varying life stages and numbers throughout the year. Therefore, steelhead could potentially be impacted by the bridge construction. An Erosion and Sedimentation Control Plan is a requirement of this project to prevent impact of the construction activities to steelhead in the Carmel River. The requirement of the various construction items that are shown on the “Construction Access Plan” of the Plans are required to prevent siltation into the Carmel River. They include the use of clean river run gravel, a temporary construction bridge for construction access across the flowing water in the Carmel River and the use of desiltation basins. Other erosion control items that are used in “Best Management Practices” for erosion control shall also be incorporated into the project to prevent siltation in the active streamflow that any impact Steelhead Trout.

5-1.46 PREVENTION OF SWALLOW NESTING:

Federal and State laws protect migratory birds, their occupied nests, and their eggs. Swallows will nest between February 15 and September 1. County Forces will install netting to prevent the nesting of swallows on the existing bridge prior to February 15. From February 15 until September 1 or completion of the contract, whichever comes first, Contractor shall prevent further nesting of swallows in the vicinity of work.

Prior to the first construction season, the County will install exclusionary devices (netting) to prevent swallow nesting. If construction operations begin after February 15 and before September 1, the Contractor shall notify the County to perform a preconstruction survey to confirm if swallow nesting is on the bridge. If swallows are returning to nests at the site the California Department of Fish and Game (CDFG) shall be consulted for the appropriate method for the Contractor to remove nests. The County must also contact the Ventura Field Office of the U. S. Fish and Wildlife Service and Caltrans.

The County will install a swallow exclusionary device prior to February 15 to prevent nest construction form being completed, or alternatively, if approved by CDFG, all swallow nests on bridge shall be removed by the Contractor prior to February 15 and continue to be removed at a frequency necessary to prevent nest construction form being completed or until a swallow exclusionary device can be installed.

Intact swallow nests are assumed to be occupied between February 15th and September 1st. If new nests are built and occupied after the beginning of work, work that would interfere with or discourage swallows from returning to their nests shall not be permitted.

No extension of time will be granted for a suspension of work due to nesting swallows.
Attention is directed to Section 11 “Permits and Agreements” for additional conditions that shall be included as part of “Prevention of Swallow Nesting.”

The contract lump sum price paid for “Bridge Removal” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved in prevention of swallow nesting, complete in place, including exclusionary devices and/or nest removal, as shown on the plans, as specified in Section 15-4 “Bridge Removal” the Standard Specifications dated July 2002 with Amendments dated 1999-2004 and these Special Provisions, and as directed by the Engineer.

5-1.47 PREVENTION OF BAT ROOSTING:

The County will perform a preconstruction survey to determine the presence of roosting bats on the bridge. If bats are found to be present, exclusionary devices may be implemented by the County to restrict access to the bridge and temporary roosting habitat shall be constructed by the County immediately adjacent to but outside of the project site.

No extension of time shall be granted for a suspension of work due to bat roosting.

Attention is directed to Section 11 “Permits and Agreements” for additional conditions that shall be included as part of “Prevention of Bat Roosting.”

Full compensation for conforming to the requirements in this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.48 ENVIRONMENTALLY SENSITIVE AREA:

An environmentally sensitive area (ESA) shall consist of an area within and near the limits of construction where access is prohibited or limited for the preservation of archeological site or existing vegetation, or protection of biological habitat as shown on the plans. The Engineer will determine the exact location of the boundaries of the ESA. No work shall be conducted within the ESA.

Attention is directed to Section 7—1.01 "Laws to be Observed," and Section 7—1.04 "Permits, Licenses, Agreements, and Certifications," of the Standard Specifications with Amendments issue date 11-30-10 regarding State and Federal regulations, permits, or agreements which pertain to an ESA.

Prior to beginning work, the boundaries of the ESA shall be clearly delineated by the placement of temporary fence (Type ESA) in conformance with the provisions in "Temporary Fence (Type ESA)" of these special provisions and as shown on the plans.

Prior to beginning work, temporary wildlife exclusion fence shall be clearly delineated and installed adjacent to and outside of the boundaries of ESA.

Vehicle access, storage or transport of materials or equipment, or other project related activities are prohibited within the boundaries of the ESA.

The Contractor shall mitigate damage or impacts to the ESA caused by the Contractor's
operations, at the Contractor's expense. If the Engineer determines mitigation work will be performed by others, or if mitigation fees are assessed the County, deductions from moneys due or to become due the Contractor will be made for the mitigation costs.

5-1.49 MATERIAL SITES:

Local material sites used by the Contractor shall be graded so that, at the time of final inspection of the contract, they will drain and will blend in with the surrounding terrain.

The Contractor must obtain a Monterey County Permit prior to opening or operating any local material site.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

5-1.50 PRESERVATION OF PROPERTY:

Attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Damaged or injured plants shall be removed and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10. At the option of the Contractor, removed trees and shrubs may be reduced to chips. The chipped material shall be spread within the highway right of way at locations designated by the Engineer.

Replacement planting of injured or damaged trees, shrubs, and other plants shall be completed prior to the start of the plant establishment period. Replacement planting shall conform to the provisions in Section 20-4.05, "Planting," of the Standard Specifications with Amendments dated 11-30-10.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation shall be allowed therefor.

5-1.51 SOLID WASTE DISPOSAL AND RECYCLING REPORT:

This work shall consist of reporting disposal and recycling of construction solid waste, as specified in these special provisions. For the purposes of this section, solid waste includes construction and demolition waste debris, but not hazardous waste.

Annually by the fifteenth day of January, the Contractor shall complete and certify Form CEM-4401, "Solid Waste Disposal and Recycling Report," which quantifies solid waste generated by the work performed and disposed of in landfills or recycled during the previous calendar year. The amount and type of solid waste disposed of or recycled shall be reported in tons. The Contractor shall also complete and certify Form CEM-4401 within 5 days following contract acceptance.

Form CEM-4401, "Solid Waste Disposal and Recycling Report" can be downloaded at:

http://www.dot.ca.gov/hq/construc/forms/cem4401.pdf
If the Contractor has not submitted Form CEM-4401, by the dates specified above, the Department will withhold the amount of $10,000 for each missing or incomplete report. The moneys withheld will be released for payment on the next monthly estimate for partial payment following the date that a complete and acceptable Form CEM-4401 is submitted to the Engineer. Upon completion of all contract work and submittal of the final Form CEM-4401, remaining withheld funds associated with this section, "Solid Waste Disposal and Recycling Report," will be released for payment. Withheld funds in conformance with this section shall be in addition to other moneys withheld provided for in the contract. No interest will be due the Contractor on withheld amounts.

Full compensation for preparing and submitting Form CEM-4401, "Solid Waste Disposal and Recycling Report," shall be considered as included in the contract price for the various items of work involved and no additional compensation will be allowed therefor.

5-1.52 RELIEF FROM MAINTENANCE AND RESPONSIBILITY:

The Contractor may be relieved of the duty of maintenance and protection for those items not directly connected with plant establishment work in conformance with the provisions in Section 7-1.15, "Relief From Maintenance and Responsibility," of the Standard Specifications with Amendments issue date 11-30-10. Water pollution control, maintain planted areas for plant establishment, maintain irrigation facilities required for plant establishment, and replacement planting of trees listed for plant establishment shall not be relieved of maintenance.
SECTION 6 – (BLANK)

SECTION 7 – (BLANK)
SECTION 8 - MATERIALS

SECTION 8-1 - MISCELLANEOUS

8-1.01 GENERAL:

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

All materials required to complete the work under this contract shall be furnished by the Contractor.

8-1.02 RELATIVE COMPACtion:

Wherever relative compaction is specified to be determined by Test Method No. California 216 or Test Method No. California 231, the relative compaction will be determined by Test Method ASTM D-1557.

8-1.03 PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS:

The State of California Department of Transportation (Caltrans), maintains the following list of Prequalified and Tested Signing and Delineation Materials. The Engineer shall not be precluded from sampling and testing products on the list of Prequalified and Tested Signing and Delineation Materials.

The manufacturer of products on the list of Prequalified and Tested Signing and Delineation Materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications.

Materials and products may be added to the list of Prequalified and Tested Signing and Delineation Materials if the manufacturer submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications and tests the Department may elect to perform.
PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective With Abrasion Resistant Surface (ARS)
1. Apex, Model 921AR (4" x 4")
2. Ennis Paint, Models C88 (4" x 4"), 911 (4" x 4") and C80FH
3. Ray-O-Lite, Models "AA" ARS (4" x 4") and ARC Round Shoulder (4" x 4")
4. 3M Series 290 (3.5" x 4")
5. 3M Series 290 PSA
6. Glowlite, Inc Model 988AR (4" x 4")

Retroreflective With Abrasion Resistant Surface (ARS)
(for recessed applications only)
1. Ennis Paint, Model 948 (2.3" x 4.7")
2. Ennis Paint, Model 944SB (2" x 4")*
3. Ray-O-Lite, Model 2002 (2" x 4.6")
4. Ray-O-Lite, Model 2004 ARS (2" x 4")*
   *For use only in 4.5 inch wide (older) recessed slots
   Non-Reflective, 4-inch Round
1. Apex Universal (Ceramic)
2. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
3. Glowlite, Inc. (Ceramic) and PP (Polypropylene)
5. Interstate Sales, "Diamond Back" (Polypropylene)
6. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
7. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
8. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)

PAVEMENT MARKERS, TEMPORARY TYPE

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Short Term Day/Night Use (14 days or less)
(For seal coat or chip seal applications, clear protective covers are required)
1. Apex Universal, Model 932
2. Filtrona Extrusion, Models T.O.M., T.R.P.M., and "HH" (High Heat)
3. Hi-Way Safety, Inc., Model 1280/1281
4. Glowlite, Inc., Model 932

STRIPING AND PAVEMENT MARKING MATERIAL

Permanent Traffic Striping and Pavement Marking Tape
1. Advanced Traffic Marking, Series 300 and 400
2. Brite-Line, Series 1000
3. Brite-Line, "DeltaLine XRP"
4. Swarco Industries, "Director 35" (For transverse application only)
5. Swarco Industries, "Director 60"
6. 3M, "Stamark" Series 380 and 5730
7. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape
(180 days or less)

1. Advanced Traffic Marking, Series 200
2. Brite-Line, Series 100
4. P.B. Laminations, Aztec, Grade 102
5. Swarco Industries, "Director-2"
6. Trelleborg Industries, R140 Series
7. 3M Series 620 "CR", and Series A750
8. 3M Series A145, Removable Black Line Mask
   (Black Tape: for use only on Hot mix asphalt surfaces)
   (Black Tape: for use only on Hot mix asphalt surfaces)
10. Brite-Line "BTR" Black Removable Tape
    (Black Tape: for use only on Hot mix asphalt surfaces)
11. Trelleborg Industries, RB-140
    (Black Tape: for use only on Hot mix asphalt surfaces)

Preformed Thermoplastic (Heated in place)

1. Flint Trading Inc., "Hot Tape"
2. Flint Trading Inc., "Premark Plus"
3. Ennis Paint Inc., "Flametape"

Ceramic Surfacing Laminate, 6" x 6"

1. Highway Ceramics, Inc.

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 66-inch

1. Filtrona Extrusion, "Flexi-Guide Models 400 and 566"
2. Carsonite, Curve-Flex CFRM-400
3. Carsonite, Roadmarker CRM-375
4. FlexStake, Model 654 TM
5. GreenLine Model CGD1-66

Special Use Type, 66-inch

1. Filtrona Extrusion, Model FG 560 (with 18-inch U-Channel base)
2. Carsonite, "Survivor" (with 18-inch U-Channel base)
3. Carsonite, Roadmarker CRM-375 (with 18-inch U-Channel base)
4. FlexStake, Model 604
5. GreenLine Model CGD (with 18-inch U-Channel base)
6. Impact Recovery Model D36, with #105 Driveable Base
7. Safe-Hit with 8-inch pavement anchor (SH248-GP1)
8. Safe-Hit with 15-inch soil anchor (SH248-GP2) and with 18-inch soil anchor (SH248-GP3)

Surface Mount Type, 48-inch
2. Carsonite, "Channelizer"
3. FlexStake, Models 704, 754 TM, and EB4
4. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
5. Three D Traffic Works "Channelflex" ID No. 522248W

CHANNELIZERS

Surface Mount Type, 36-inch
1. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) and MF-180-36 (Flat)
2. Filtrona Extrusion, Flexi-Guide Models FG300PE, FG300UR, and FG300EFX
3. Carsonite, "Super Duck" (Round SDR-336)
4. Carsonite, Model SDCF03601MB "Channelizer"
5. FlexStake, Models 703, 753 TM, and EB3
6. GreenLine, Model SMD-36
8. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base
9. Safe-Hit, Guide Post, Model SH236SMA and Dura-Post, Model SHL36SMA
10. Three D Traffic Works "Boomerang"5200 Series

Lane Separation System
1. Filtrona Extrusion, "Flexi-Guide (FG) 300 Curb System"
2. Qwick Kurb, "Klemmfix Guide System"
3. Dura-Curb System
4. Tuff Curb

CONICAL DELINEATORS, 42-inch
(For 28-inch Traffic Cones, see Standard Specifications)
1. Bent Manufacturing Company "T-Top"
2. Plastic Safety Systems "Navigator-42"
3. Traffix Devices "Grabber"
4. Three D Traffic Works "Ringtop" TD7000, ID No. 742143
5. Three D Traffic Works, TD7500
6. Work Area Protection Corp. C-42

OBJECT MARKERS, Type "K", 18-inch
1. Filtrona Extrusion, Model FG318PE
2. Carsonite, Model SMD 615
3. FlexStake, Model 701 KM
4. Safe-Hit, Model SH718SMA

Type "K-4" / "Q" Object Markers, 24-inch
1. Bent Manufacturing "Masterflex" Model MF-360-24
2. Filtrona Extrusion, Model FG324PE
3. Caronite, "Channelizer"
4. FlexStake, Model 701KM
5. Safe-Hit, Models SH824SMA_WA and SH824GP3_WA
6. Three D Traffic Works ID No. 531702W and TD 5200
7. Three D Traffic Works ID No. 520896W

CONCRETE BARRIER MARKERS AND
TEMPORARY RAILING (TYPE K) REFLECTORS

Impactable Type
1. ARTUK, "FB"
2. Filtrona Extrusion, Models PCBM-12 and PCBM-T12
3. Duraflex Corp., "Flexx 2020" and "Electriflexx"
4. Hi-Way Safety, Inc., Model GMKRM100
5. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
6. Three D Traffic Works "Roadguide" Model TD 9304

Non-Impactable Type
1. ARTUK, JD Series
3. Vega Molded Products, Models GBM and JD
4. Plastic Vacuum Forming, "Cap-It C400"

METAL BEAM GUARD RAIL POST MARKERS
(For use to the left of traffic)
1. Filtrona Extrusion, "Mini" (3" x 10")
2. Creative Building Products, "Dura-Bull, Model 11201"
3. Duraflex Corp., "Railrider"
4. Plastic Vacuum Forming, "Cap-It C300"

CONCRETE BARRIER DELINEATORS, 16-inch
(For use to the right of traffic)
1. Filtrona Extrusion, Model PCBM T-16
2. Safe-Hit, Model SH216RBM

CONCRETE BARRIER-MOUNTED MINI-DRUM (10" x 14" x 22")
1. Stinson Equipment Company "SaddleMarker"

GUARD RAILING DELINEATOR
(Place top of reflective element at 48 inches above plane of roadway)
Wood Post Type, 27-inch
1. Filtrona Extrusion, FG 427 and FG 527
2. Carsonite, Model 427
3. FlexStake, Model 102 GR
4. GreenLine GRD 27
5. Safe-Hit, Model SH227GRD
6. Three D Traffic Works "Guardflex" TD9100
7. New Directions Mfg, NDM27

Steel Post Type
1. Carsonite, Model CFGR-327

RETROREFLECTIVE SHEETING

Channelizers, Barrier Markers, and Delineators
1. Avery Dennison T-6500 Series (For rigid substrate devices only)
2. Avery Dennison WR-7100 Series
3. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
4. Reflexite, PC-1000 Metalized Polycarbonate
5. Reflexite, AC-1000 Acrylic
6. Reflexite, AP-1000 Metalized Polyester
7. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
8. 3M, High Intensity

Traffic Cones, 4-inch and 6-inch Sleeves
1. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
2. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight"
3. 3M Series 3840
4. Avery Dennison S-9000C

Drums
1. Avery Dennison WR-6100
2. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
3. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
4. 3M Series 3810

Barricades: Type I, Medium-Intensity
(Typically Enclosed Lens, Glass-Bead Element)
1. Nippon Carbide Industries, CN8117
2. Avery Dennison, W 1100 series
3. 3M Series CW 44

Barricades: Type II, Medium-High-Intensity
(Typically Enclosed Lens, Glass-Bead Element)
1. Avery Dennison, W-2100 Series

   Signs: Type II, Medium-High-Intensity
   (Typically Enclosed Lens, Glass-Bead Element)
   1. Avery Dennison, T-2500 Series
   2. Nippon Carbide Industries, Nikkalite 18000

   Signs: Type III, High-Intensity
   (Typically Encapsulated Glass-Bead Element)
   1. Avery Dennison, T-5500A and T-6500 Series
   2. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
   3. 3M 3870 and 3930 Series

   Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)
   1. Avery Dennison, T-6500 Series
   2. Nippon Carbide Industries, Crystal Grade, 94000 Series
   3. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
   4. 3M Series 3930 and Series 3924S

   Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive
   1. Avery Dennison, WU-6014
   2. Novabrite LLC, "Economate"
   3. Reflexite "Vinyl"
   4. Reflexite "SuperBright"
   5. Reflexite "Marathon"
   6. 3M Series RS20

   Signs: Type VII, Super-High-Intensity
   (Typically Unmetallized Microprismatic Element)
   1. 3M Series 3924S, Fluorescent Orange
   2. 3M LDP Series 3970

   Signs: Type VIII, Super-High-Intensity
   (Typically Unmetallized Microprismatic Element)
   1. Avery Dennison, T-7500 Series
   2. Avery Dennison, T-7511 Fluorescent Yellow
   3. Avery Dennison, T-7513 Fluorescent Yellow Green
   4. Avery Dennison, W-7514 Fluorescent Orange
   5. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
   6. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

   Signs: Type IX, Very-High-Intensity
(Typically Unmetallized Microprismatic Element)
1. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
2. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
3. 3M VIP Series 3990 Diamond Grade
4. Avery Dennison T-9500 Series
5. Avery Dennison, T9513, Fluorescent Yellow Green
6. Avery Dennison, W9514, Fluorescent Orange
7. Avery Dennison, T-9511 Fluorescent Yellow

SPECIALTY SIGNS

1. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

ALTERNATIVE SIGN SUBSTRATES

Fiberglass Reinforced Plastic (FRP) and Expanded Foam PVC
1. Fiber-Brite (FRP)
2. Sequentia, "Polyplate" (FRP)
3. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48-inch or less)(PVC)

Aluminum Composite, Temporary Construction Signs and
Permanent Signs up to 4 foot, 7 Inches
1. Alcan Composites "Dibond Material, 80 mils"
2. Mitsubishi Chemical America, Alpolic 350
8-1.04 ENGINEERING FABRICS:

Engineering fabrics shall conform to the provisions in Section 88, "Engineering Fabrics," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Filter fabric for this project shall be ultraviolet (UV) ray protected.

8-1.05 STATE-FURNISHED MATERIALS

Attention is directed to Section 6-1.02, "State-Furnished Materials," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

No materials will be furnished to the Contractor.
SECTION 8-2 - CONCRETE

8-2.01 PORTLAND CEMENT CONCRETE:

Portland cement concrete shall conform to the provisions in Section 90, "Portland Cement Concrete," of the Standard Specifications and these special provisions.

The State of California Department of Transportation (Caltrans), maintains a list of sources of fine and coarse aggregate that have been approved for use with a reduced amount of supplementary cementitious material in the total amount of cementitious material to be used. A source of aggregate will be considered for addition to the approved list if the producer of the aggregate submits to the Transportation Laboratory certified test results from a qualified testing laboratory that verify the aggregate complies with the requirements. Before the testing starts, the aggregate test shall be registered with the Department. A registration number can be obtained by calling (916) 227-7228. The registration number shall be used as the identification for the aggregate sample in correspondence with the Department. Upon request, a split of the tested sample shall be provided to the Department. Approval of aggregate will depend upon compliance with the specifications, based on the certified test results submitted, together with any replicate testing the Department may elect to perform. Approval will expire 3 years from the date the most recent registered and evaluated sample was collected from the aggregate source.

Qualified testing laboratories shall conform to the following requirements:

1. Laboratories performing ASTM Designation: C 1293 shall participate in the Cement and Concrete Reference Laboratory (CCRL) Concrete Proficiency Sample Program and shall have received a score of 3 or better on each test of the previous 2 sets of concrete samples.

2. Laboratories performing ASTM Designation: C 1260 shall participate in the Cement and Concrete Reference Laboratory (CCRL) Pozzolan Proficiency Sample Program and shall have received a score of 3 or better on the shrinkage and soundness tests of the previous 2 sets of pozzolan samples.

Aggregates on the list shall conform to one of the following requirements:

1. When the aggregate is tested in conformance with the requirements in California Test 554 and ASTM Designation: C 1293, the average expansion at one year shall be less than or equal to 0.040 percent; or

2. When the aggregate is tested in conformance with the requirements in California Test 554 and ASTM Designation: C 1260, the average of the expansion at 16 days shall be less than or equal to 0.15 percent.
If the aggregates used in the concrete are on the Department's list, the minimum amount of supplementary cementitious material shall conform to the following:

1. If fly ash or natural pozzolan conforming to the provisions in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the Standard Specifications is used, the minimum amount of supplementary cementitious material shall be 15 percent by weight of the total cementitious material; or

2. If silica fume conforming to the provisions in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the Standard Specifications is used, the minimum amount of supplementary cementitious material shall be 7 percent by weight of the total cementitious material.

The limitation on tricalcium silicate (C₃S) content in Type II cement specified in Section 90-2.01A, "Cement," of the Standard Specifications shall not apply.

**SECTION 8-3 - WELDING**

8-3.1 WELDING

8-3.1A GENERAL

Flux cored welding electrodes conforming to the requirements of AWS A5.20 E6XT-4 or E7XT-4 shall not be used to perform welding for this project.

Wherever reference is made to the following AWS welding codes in the Standard Specifications, on the plans, or in these special provisions, the year of adoption for these codes shall be as listed:

<table>
<thead>
<tr>
<th>AWS Code</th>
<th>Year of Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1.1</td>
<td>2006</td>
</tr>
<tr>
<td>D1.4</td>
<td>2005</td>
</tr>
<tr>
<td>D1.5</td>
<td>2002</td>
</tr>
<tr>
<td>D1.6</td>
<td>1999</td>
</tr>
</tbody>
</table>

Requirements of the AWS welding codes shall apply unless otherwise specified in the Standard Specifications, on the plans, or in these special provisions. Wherever the abbreviation AWS is used, it shall be equivalent to the abbreviations ANSI/AWS or AASHTO/AWS.

Section 6.1.1.1 of AWS D1.5 is replaced with the following:

Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and as necessary to ensure that materials and workmanship conform to the requirements of the contract documents.

Unless otherwise specified, Sections 6.1.3 through 6.1.4.3 of AWS D1.1, Section 7.1.2 of AWS D1.4, and Sections 6.1.1.2 through 6.1.3.3 of AWS D1.5 are replaced with the following:

The QC Inspector shall be the duly designated person who acts for and on behalf of the Contractor for inspection, testing, and quality related matters for all welding.
Quality Assurance (QA) is the prerogative of the Engineer. The QA Inspector is the duly designated person who acts for and on behalf of the Engineer.

The QC Inspector shall be responsible for quality control acceptance or rejection of materials and workmanship, and shall be currently certified as an AWS Certified Welding Inspector (CWI) in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors."

The QC Inspector may be assisted by an Assistant QC Inspector provided that this individual is currently certified as an AWS Certified Associate Welding Inspector (CAWI) in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors." The Assistant QC Inspector may perform inspection under the direct supervision of the QC Inspector provided the assistant is always within visible and audible range of the QC Inspector. The QC Inspector shall be responsible for signing all reports and for determining if welded materials conform to workmanship and acceptance criteria. The ratio of QC Assistants to QC Inspectors shall not exceed 5 to 1.

When the term "Inspector" is used without further qualification, it shall refer to the QC Inspector.

When any work is welded in conformance with the provisions in Section 75, "Miscellaneous Metal," of the Standard Specifications, not including Section 75-1.035, "Bridge Joint Restrainer Units," of the Standard Specifications, Section 6.1.4 of AWS D1.1 is replaced with the following:

The QC Inspector shall be responsible for quality control acceptance or rejection of materials and workmanship and shall be currently certified as an AWS CWI in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors," or as a Welding Inspector Specialist (WIS) in conformance with the requirements in AWS B5.2, "Specification for the Qualification of Welding Inspector Specialists and Welding Inspector Assistants."

Section 6.14.6, "Personnel Qualification," of AWS D1.1, Section 7.8, "Personnel Qualification," of AWS D1.4, and Section 6.1.3.4, "Personnel Qualification," of AWS D1.5 are replaced with the following:

Personnel performing nondestructive testing (NDT) shall be qualified and certified in conformance with the requirements of the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A and the Written Practice of the NDT firm. The Written Practice of the NDT firm shall meet or exceed the guidelines of the ASNT Recommended Practice No. SNT-TC-1A. Individuals who perform NDT, review the results, and prepare the written reports shall be either:

A. Certified NDT Level II technicians, or;
B. Level III technicians who hold a current ASNT Level III certificate in that discipline and are authorized and certified to perform the work of Level II technicians.

Section 6.5.4 of AWS D1.5 is replaced with the following:

The QC Inspector shall inspect and approve each joint preparation, assembly practice, welding technique, joint fit-up, and the performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved Welding Procedure Specification
(WPS) are met. The QC Inspector shall examine the work to make certain that it meets the requirements of Sections 3 and 6.26. The size and contour of all welds shall be measured using suitable gages. Visual inspection for cracks in welds and base metal, and for other discontinuities shall be aided by strong light, magnifiers, or such other devices as may be helpful. Acceptance criteria different from those specified in this code may be used when approved by the Engineer.

Section 6.6.5, "Nonspecified NDT Other than Visual," of AWS D1.1, Section 7.6.5 of AWS D1.4 and Section 6.6.5 of AWS D1.5 shall not apply.

For any welding, the Engineer may direct the Contractor to perform NDT that is in addition to the visual inspection or NDT specified in the AWS or other specified welding codes, in the Standard Specifications, or in these special provisions. Except as provided for in these special provisions, additional NDT required by the Engineer, and associated repair work, will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications. Prior to release of welded material by the Engineer, if testing by NDT methods other than those originally specified discloses an attempt to defraud or reveals a gross nonconformance, all costs associated with the repair of the deficient area, including NDT of the weld and of the repair, and any delays caused by the repair, shall be at the Contractor's expense. A gross nonconformance is defined as the sum of planar type rejectable indications in more than 20 percent of the tested length.

When less than 100 percent of NDT is specified for any weld, it is expected that the entire length of weld meet the specified acceptance-rejection criteria. Should any welding deficiencies be discovered by additional NDT directed or performed by the Engineer that utilizes the same NDT method as that originally specified, all costs associated with the repair of the deficient area, including NDT of the weld and of the weld repair, and any delays caused by the repair, shall be at the Contractor's expense.

Repair work to correct welding deficiencies discovered by visual inspection directed or performed by the Engineer, and any associated delays or expenses caused to the Contractor by performing these repairs, shall be at the Contractor's expense.

The Engineer shall have the authority to verify the qualifications or certifications of any welder, QC Inspector, or NDT personnel to specified levels by retests or other means approved by the Engineer.

Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day welding is performed. For each inspection, including fit-up, Welding Procedure Specification (WPS) verification, and final weld inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS or other specified code criteria and the requirements of these special provisions on all welded joints before welding, during welding, and after the completion of each weld.

In addition to the requirements specified in the applicable code, the period of effectiveness for a welder's or welding operator's qualification shall be a maximum of 3 years for the same weld process, welding position, and weld type. If welding will be performed without gas shielding, then qualification shall also be without gas shielding. Excluding welding of fracture critical members, a valid qualification at the beginning of work on a contract will be acceptable for the entire period of the contract, as long as the welder's or welding operator's work remains satisfactory.
In addition to the requirements of AWS D1.1, welding procedures qualification for work welded in conformance with that code shall conform to the following:

When a nonstandard weld joint is to be made using a combination of WPSs, a single test may be conducted combining the WPSs to be used in production, provided the essential variables, including weld bead placement, of each process are limited to those established in Table 4.5.

In addition to the requirements of AWS D1.5, Section 5.12 or 5.13, welding procedures qualification for work welded in conformance with that code shall conform to the following requirements:

A. Unless considered prequalified, fillet welds shall be qualified in each position. The fillet weld soundness test shall be conducted using the essential variables of the WPS as established by the Procedure Qualification Record (PQR).

B. For qualification of joints that do not conform to Figures 2.4 and 2.5 of AWS D1.5, a minimum of two WPS qualification tests are required. The tests shall be conducted using both Figure 5.1 and Figure 5.3. The test conforming to Figure 5.1 shall be conducted in conformance with AWS D1.5, Section 5.12 or 5.13. The test conforming to Figure 5.3 shall be conducted using the welding electrical parameters that were established for the test conducted conforming to Figure 5.1. The ranges of welding electrical parameters established during welding per Figure 5.1 in conformance with AWS D1.5, Section 5.12, shall be further restricted according to the limits in Table 5.3 during welding per Figure 5.3.

C. Multiple zones within a weld joint may be qualified. The travel speed, amperage, and voltage values that are used for tests conducted per AWS D1.5 Section 5.13 shall be consistent for each pass in a weld joint, and shall in no case vary by more than ±10 percent for travel speed, ±10 percent for amperage, and ±7 percent for voltage as measured from a predetermined target value or average within each weld pass or zone. The travel speed shall in no case vary by more than ±15 percent when using submerged arc welding.

D. For a WPS qualified in conformance with AWS D1.5 Section 5.13, the values to be used for calculating ranges for current and voltage shall be based on the average of all weld passes made in the test. Heat input shall be calculated using the average of current and voltage of all weld passes made in the test for a WPS qualified in conformance with Section 5.12 or 5.13.

E. Macroetch tests are required for WPS qualification tests, and acceptance shall be per AWS D1.5 Section 5.19.3.

F. When a nonstandard weld joint is to be made using a combination of WPSs, a test conforming to Figure 5.3 may be conducted combining the WPSs to be used in production, provided the essential variables, including weld bead placement, of each process are limited to those established in Table 5.3.

G. Prior to preparing mechanical test specimens, the PQR welds shall be inspected by visual and radiographic tests. Backing bar shall be 3 inches in width and shall remain in place during NDT testing. Results of the visual and radiographic tests shall comply with AWS D1.5 Section 6.26.2, excluding Section 6.26.2.2. Test plates that do not comply with both tests shall not be used.
8.3.1B WELDING QUALITY CONTROL:

Welding quality control shall conform to the requirements in the AWS or other specified welding codes, the Standard Specifications, and these special provisions.

Unless otherwise specified, welding quality control shall apply when any work is welded in conformance with the provisions in Section 49, "Piling," Section 52, "Reinforcement," Section 55, "Steel Structures," or Section 75-1.035, "Bridge Joint Restrainer Units," of the Standard Specifications.

All welding will require inspection by the Engineer. The Contractor shall request inspection at least 3 working days prior to the beginning of welding for locations within California and 5 working days for locations outside of California. The Contractor shall request inspection at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/smbforms.htm

Continuous inspection shall be provided when any welding is being performed. Continuous inspection, as a minimum, shall include having a QC Inspector within such close proximity of all welders or welding operators so that inspections by the QC Inspector of each welding operation at each welding location does not lapse for a period exceeding 30 minutes.

When joint weld details that are not prequalified to the details of Section 3 of AWS D1.1 or to the details of Figure 2.4 or 2.5 of AWS D1.5 are proposed for use in the work, the joint details, their intended locations, and the proposed welding parameters and essential variables, shall be approved by the Engineer. The Contractor shall allow the Engineer 2 weeks to complete the review of the proposed joint detail locations. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications. Upon approval of the proposed joint detail locations and qualification of the proposed joint details, welders and welding operators using these details shall perform a qualification test plate using the WPS variables and the joint detail to be used in production. The test plate shall have the maximum thickness to be used in production and a minimum length of 18 inches. The test plate shall be mechanically and radiographically tested. Mechanical and radiographic testing and acceptance criteria shall be as specified in the applicable AWS codes.

The Engineer will witness all qualification tests for WPSs that were not previously approved by the Department. Unless otherwise specified, an approved independent third party will witness the qualification tests for welders or welding operators. The independent third party shall be a current CWI and shall not be an employee of the contractor performing the welding. The Contractor shall allow the Engineer 2 weeks to review the qualifications and copy of the current certification of the independent third party. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications. The Contractor shall notify the Engineer one week prior to performing any qualification tests. Witnessing of qualification tests by the Engineer shall not constitute approval of the intended joint locations, welding parameters, or essential variables.

The Contractor shall designate in writing a welding Quality Control Manager (QCM). The QCM
shall be responsible directly to the Contractor for the quality of welding, including materials and workmanship, performed by the Contractor and subcontractors.

The QCM shall be the sole individual responsible to the Contractor for submitting, receiving, reviewing, and approving all correspondence, required submittals, and reports to and from the Engineer. The QCM shall be a registered professional engineer or shall be currently certified as a CWI.

Unless the QCM is hired by a subcontractor providing only QC services, the QCM shall not be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project. The QCM may be an employee of the Contractor.

Welding inspection personnel or NDT firms to be used in the work shall not be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project, except for the following conditions:

A. The work is welded in conformance with AWS D1.5 and is performed at a permanent fabrication or manufacturing facility that is certified under the AISC Quality Certification Program, Category Cbr, Major Steel Bridges and Fracture Critical endorsement F, when applicable.

B. The work is welded in conformance with AWS D1.1 at a permanent pipe manufacturing or fabrication facility that maintains a QC program that is independent from production.

For welding performed at such facilities, the inspection personnel or NDT firms may be employed or compensated by the facility performing the welding provided the facility maintains a QC program that is independent from production.

Prior to submitting the Welding Quality Control Plan (WQCP) required herein, a prewelding meeting between the Engineer, the Contractor's QCM, and a representative from each entity performing welding or inspection for this project, shall be held to discuss the requirements for the WQCP.

The Contractor shall submit to the Engineer, in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 2 copies of a separate WQCP for each subcontractor or supplier for each item of work for which welding is to be performed.

The Contractor shall allow the Engineer 2 weeks to review the WQCP submittal after a complete plan has been received. No welding shall be performed until the WQCP is approved in writing by the Engineer. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

An amended WQCP or any addendum to the approved WQCP shall be submitted to, and approved in writing by the Engineer, for proposed revisions to the approved WQCP. An amended WQCP or addendum will be required for revisions to the WQCP, including but not limited to a revised WPS; additional welders; changes in NDT firms, QC, or NDT personnel or procedures; or updated systems for tracking and identifying welds. The Engineer shall have one week to complete the review of
the amended WQCP or addendum. Work affected by the proposed revisions shall not be performed until the amended WQCP or addendum has been approved. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Information regarding the contents, format, and organization of a WQCP, is available at the Transportation Laboratory and at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm

After final approval of the WQCP, amended WQCP, or addendum, the Contractor shall submit 7 copies to the Engineer of the approved documents. A copy of the Engineer approved document shall be available at each location where welding is to be performed.

A daily production log for welding shall be kept for each day that welding is performed. The log shall clearly indicate the locations of all welding. The log shall include the welders' names, amount of welding performed, any problems or deficiencies discovered, and any testing or repair work performed, at each location. The daily report from each QC Inspector shall also be included in the log.

The following items shall be included in a Welding Report that is to be submitted to the Engineer within 15 days following the performance of any welding:

A. A daily production log.
B. Reports of all visual weld inspections and NDT.
C. Radiographs and radiographic reports, and other required NDT reports.
D. A summary of welding and NDT activities that occurred during the reporting period.
E. Reports of each application of heat straightening.
F. A summarized log listing the rejected lengths of weld by welder, position, process, joint configuration, and piece number.
G. Documentation that the Contractor has evaluated all radiographs and other nondestructive tests and corrected all rejectable deficiencies, and that all repaired welds have been reexamined using the required NDT and found acceptable.

The following information shall be clearly written on the outside of radiographic envelopes: name of the QCM, name of the nondestructive testing firm, name of the radiographer, date, contract number, complete part description, and all included weld numbers, report numbers, and station markers or views, as detailed in the WQCP. In addition, all interleaves shall have clearly written on them the part description and all included weld numbers and station markers or views, as detailed in the WQCP. A maximum of 2 pieces of film shall be used for each interleave.

Reports of all visual inspections and NDT shall be signed by the inspector or technician and submitted daily to the QCM for review and signature prior to submittal to the Engineer. Corresponding names shall be clearly printed or typewritten next to all signatures. Reports of all NDT, whether specified, additional, or informational, performed by the Contractor shall be submitted to the Engineer.

The Engineer will review the Welding Report to determine if the Contractor is in conformance
with the WQCP. Unless otherwise specified, the Engineer shall be allowed 2 weeks to review the report and respond in writing after the complete Welding Report has been received. Prior to receiving notification from the Engineer of the Contractor's conformance with the WQCP, the Contractor may encase in concrete or cover welds for which the Welding Report has been submitted. However, should the Contractor elect to encase or cover those welds prior to receiving notification from the Engineer, it is expressly understood that the Contractor shall not be relieved of the responsibility for incorporating material in the work that conforms to the requirements of the plans and specifications. Material not conforming to these requirements will be subject to rejection. Should the Contractor elect to wait to encase or cover welds pending notification by the Engineer, and in the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

For steel pipe piling, including bar reinforcement in the piling, the Contractor shall allow the Engineer 2 business days to review the Welding Report and respond in writing after the required items have been received. No field welded steel pipe piling shall be installed, and no reinforcement in the piling shall be encased in concrete until the Engineer has approved the above requirements in writing.

In addition to the requirements in AWS D1.1 and AWS D1.5, second-time excavations of welds or base metal to repair unacceptable discontinuities, regardless of NDT method, and all repairs of cracks require prior approval of the Engineer.

The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered, and also of the proposed repair procedures to correct them. For requests to perform second-time repairs or repairs of cracks, the Contractor shall include an engineering evaluation of the proposed repair. The engineering evaluation, at a minimum, shall address the following:

A. What is causing each defect?
B. Why the repair will not degrade the material properties?
C. What steps are being taken to prevent similar defects from happening again?

The Contractor shall allow the Engineer 7 days to review these procedures. No remedial work shall begin until the repair procedures are approved in writing by the Engineer. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The QCM shall sign and furnish to the Engineer, a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each item of work for which welding was performed. The certificate shall state that all of the materials and workmanship incorporated in the work, and all required tests and inspections of this work, have been performed in conformance with the details shown on the plans, the Standard Specifications, and these special provisions.
8-3.1C STEEL PIPE PILING QUALIFICATION AUDIT:

The Contractor shall submit documentation that the Class N Steel Pipe Piling Qualification Audit has been successfully completed before steel shell welding operations are performed.

The audit shall have been completed for each pile shell diameter, thickness, and grade of steel to be supplied for this project. The procedures for requesting and completing the audit are available at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm

8-3.1D PAYMENT:

Full compensation for conforming to the requirements of "Welding" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.
SECTION 9 - DESCRIPTION OF WORK

The work to be done consists, in general, of removing and replacing in construction stages one structure briefly described as:

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115
FEDERAL AID PROJECT NO. BRLO-5944 (010)
PROJECT NO. 382065

The Schulte Road Bridge construction consists, in general, of the construction of a new bridge with associated approach roadway with driveways. The new bridge will consist of a two span cast-in-place post-tensioned concrete box girder bridge approximately 206 feet long and 31.5 feet wide supported by driven steel piles and cast-in-steel-shell (CISS) concrete piles.

The project is scheduled for two years of construction with the upstream half of the bridge to be completed during the first year and the second half of the bridge completed in the second year. A closure pour will join the two halves of the bridge. The existing bridge will be used as a one lane detour for the first year and the newly built upstream half of the bridge will be used as a one lane detour the second year. The full bridge and approach roadway will be completed prior to the routing of two lanes of traffic on the bridge.

The project will also include such other items or details not mentioned above that are required by the plans, Standard Specifications, or these Special Provisions and shall be performed, placed, constructed or installed.

9-1.01 INCREASED AND DECREASED QUANTITIES:

The County reserves the right to increase, decrease or delete the quantities of items as follows:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Temporary Fence (Type ESA)</td>
</tr>
<tr>
<td>9</td>
<td>Temporary Silt Fence</td>
</tr>
<tr>
<td>16</td>
<td>Temporary Retaining Wall</td>
</tr>
</tbody>
</table>

The adjustment provision in Section 4-1.03, “Changes,” of the Standard Specifications with Amendments issue date 11-30-10 shall not apply to the above items.
SECTION 10 - CONSTRUCTION DETAILS

SECTION 10-1 - GENERAL PROVISIONS

10-1.01 CONSTRUCTION PROJECT INFORMATION SIGNS:

Before any major physical construction work readily visible to highway users is started on this contract, the Contractor shall furnish and erect two Type 1 Construction Project Information signs at the locations designated by the Engineer.

The signs and overlays shall be of a type and material consistent with the estimated time of completion of the project and shall conform to the details shown on the plans.

The sign letters, the border and the Department's construction logos shall conform to the colors (non-reflective) and details shown on the plans and Revised Standard Plan RSP T7, and shall be on a white background (non-reflective). Revised Standard Plan RSP T7 is shown on plan sheet 13 “Construction Area Signs” of the plans. The colors blue and orange shall conform to PR Color Number 3 and Number 6, respectively, as specified in the Federal Highway Administration's Color Tolerance Chart.

The sign message to be used for fund types shall consist of the following, in the order shown:

<table>
<thead>
<tr>
<th>FEDERAL HIGHWAY TRUST FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE HIGHWAY LOCAL SEISMIC RETROFIT FUNDS</td>
</tr>
<tr>
<td>MONTEREY COUNTY TRANSPORTATION FUNDS</td>
</tr>
</tbody>
</table>

The sign message to be used for type of work shall consist of the following:

BRIDGE CONSTRUCTION

The sign message to be used for the Year of Completion of Project Construction will be furnished by the Engineer. The Contractor shall furnish and install the "Year" sign overlay within 10 working days of notification of the year date to be used.

The letter sizes to be used shall be as shown on Revised Standard Plan RSP T7. The information shown on the signs shall be limited to that shown on the plans.

The signs shall be kept clean and in good repair by the Contractor.

Upon completion of the work, the signs shall be removed and disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13 of the Standard Specifications with Amendments issue date 11-30-10.

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the construction project information signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.
10-1.02 RESIDENT ENGINEERS OFFICE:

The Contractor shall furnish, until one hundred percent of the work is accepted exclusive of plant establishment period, a Resident Engineers office conforming to these Special Provisions. The office shall be for the exclusive use of the Engineer and shall be within the Schulte Road Bridge Project site at a location as indicated by the Engineer.

The overall size of the office shall be 700 square feet minimum, and it shall be furnished with doors and windows capable of being locked. The office shall be partitioned to provide two private offices of not less than 115 square feet each and a conference area of not less than 180 square feet. The private offices shall be provided with a lockable closet and at least 25 feet of 1 foot wide shelving located as directed by the Engineer and two portable bookcases, each with a minimum of three four-foot long shelves.

If the office is a trailer, the perimeter of the office area shall be secured by a 6 foot high chain link fence. The Contractor shall provide a lockable gate and lock assembly with 2 keys. Title to the trailer and provided contents shall remain with the Contractor. The Contractor shall provide the Engineer with a copy of written permission or agreement to place the Resident Engineer trailer on private property unless such private property is with the project temporary construction easement or right of way as shown on the plans.

The office shall be furnished with three parking spaces (within the above chain link fence or contiguous to the office building); 2 desks capable of being locked; one drafting table; one 3 feet by 6 feet table; 6 standard chairs; 3 desk chairs with arms; one drafting stool; one dry plain paper copying machine with automatic feed and collator similar to Canon NP1250 capable of making letter size (8 1/2" x 11"), legal size (8 1/2" x 14"), and ledger size (11" x 17") copies together with sufficient paper and materials for 1000 copies per month; 2 four-drawer legal size filing cabinets; 1 plan rack; one refrigerator; one fire extinguisher; one first-aid kit ( bandages, gauze, etc.); bottled drinking water, restroom (24 square feet minimum) equipped with toilet and sink with hot and cold running water, soap, and paper products; 4 telephone lines (two for telephones, one for dedicated FAX use, and one for computer modem); 2 telephones capable of rollover ring; and one full-feature telephone answering machine.

The refrigerator shall have a freezer no smaller than 3 cubic feet and a refrigerated compartment no smaller than 12 cubic feet.

The Contractor shall provide, not less than weekly, office cleaning service including waste paper/trash removal, floor cleaning, and rest room maintenance to the satisfaction of the Engineer.

The Contractor shall provide for the Engineer’s exclusive possession and use a complete computer system with two computers connected to a laser printer. The Contractor shall maintain and repair the computer system. The Engineer may use the furnished computer hardware, software, and instruction manuals for any purposes relating to the project. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish.

The computer hardware and software furnished by the Contractor shall be compatible with his project scheduling software and the project management and administration needs of the Engineer for the project and shall include instruction manuals and other documentation normally provided with the
software.

The Contractor shall furnish, install, set up, maintain, and repair the computer hardware and software ready for use within a week after the office is made available to the Engineer.

All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims involving contract progress are pending. When contract claims involving contract progress are pending, computer hardware or software shall not be removed until the final estimate has been submitted to the Contractor. If, before the final estimate has been submitted to the Contractor, the Contractor requests relief of maintenance of the Resident Engineers Office and if such a request is approved by the Engineer, the Contractor shall relocate the computer system to another location, within the County limits, designated by the Engineer.

Equipment furnished shall be for the Engineer’s sole use and of standard quality and new or like new in appearance and function. The office shall be installed and ready for occupancy no later than twenty working days after the notice to proceed. Monthly telephone bills shall be paid by the Contractor and reimbursed by contract change order with a 15 percent markup allowed.

The contract lump sum price paid for Resident Engineer office shall include full compensation for furnishing and installing the Resident Engineers office as specified, maintaining until the final estimate has been approved by the Director of Public Works, and removing the office, utility connections including bottled water service, furnishings, computer system, office equipment, office supplies, and utility billings (except for monthly telephone costs as provided above) as specified in these Special Provisions and as directed by the Engineer.

Payment for Resident Engineers office shall be made as follows:

A. At such time as installation and setup are complete (ready to occupy/ use), including computer system and software, then 25 percent payment for Resident Engineers office shall be made.

B. At such time as fifty percent of the work is completed, an additional 50 percent (total 75 percent) payment for Resident Engineers office shall be made.

C. At such time as one hundred percent of the work is accepted, then the final 25 percent (total 100 percent) payment for Resident Engineers office shall be made.

10-1.03 ORDER OF WORK:

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these Special Provisions.

Attention is directed to "Maintaining Traffic," and "Temporary Pavement Delineation," and “Closure Pours” of these Special Provisions and the stage construction sheets of the plans.

Attention is directed to "Concrete Barrier" of these special provisions and the architectural
treatment test panel specified.

The four water-carrying lines in the bridge superstructure are not for identical or interchangeable uses. The Contractor shall coordinate with the utility companies to provide all required services at all times.

The Contractor shall cooperate with utility companies as they install their carrier lines within the casings and conduit. Stage 1A utilities will be installed during the winter shutdown period or initial period prior to construction within the riverbed.

For the purposes of this project:

A. Soffit Closure Pour shall be that portion of the box girder bottom slab that is:
   1. longitudinally between the faces of the End Diaphragm and the Pier 2 Cap,
   2. transversely between the Stage 1 and Stage 2 constructed portions, and
   3. six-inches thick.

B. Deck Closure Pour shall be that portion of the box girder top slab that is:
   1. longitudinally between the End Diaphragm and the face of the Pier 2 Cap,
   2. transversely between the Stage 1 and Stage 2 constructed portions, and
   3. vertically from the Construction Joint to finished grade.

C. End Diaphragm shall be that portion of the box girder over the Abutment (including the large fillet and the portion of the soffit slab directly over the fillet) that is:
   1. longitudinally between the formed end of the box girder to the line of intersection between the large fillet and the bottom slab,
   2. transversely between the Stage 1 and Stage 2 constructed portions, and
   3. vertically from the abutment bearing up to the Construction Joint.

D. Pier Cap shall be that block portion of the box girder over Pier 2 (including the dropped portion) that is:
   1. 6.5 feet in the longitudinal direction,
   2. transversely between the Stage 1 and Stage 2 constructed portions, and
   3. vertically from the top of column up to the Construction Joint.

E. Construction Joint shall be at the intersection of the four-inch fillet with the vertical faces of the girder stems, End Diaphragm, and Pier 2 Cap.

The order of work for Stage 3 Construction shall be:

A. Construct soffit closure pour and utility cradles.
B. Place welded steel casing.
C. Place End Diaphragm and Pier 2 Cap closure pours to Construction Joint.
D. Construct deck closure pour.
Attention is directed to “Progress Schedule (Critical Path Method)” of these Special Provisions regarding the submittal of a general time-scaled logic diagram within 10 days after approval of the contract. The diagram shall be submitted prior to performing any work that may be affected by any proposed deviations to the construction staging of the project.

The work shall be performed in conformance with the stages of construction shown on the plans. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction.

In each stage, after completion of the proceeding stage, the first order of work shall be the removal of existing pavement delineation and if required, the resetting of temporary K rail and crash cushions as directed by the Engineer. Pavement delineation removal shall be coordinated with new delineation so that lane lines are provided at all times on traveled ways open to the public traffic.

Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that is to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall include the limits or changes in striping pattern, including one and two-way barrier lines, limit lines, crosswalks and other pavement markings.

Full compensation for referencing existing pavement delineation shall be considered as included in the contract prices paid for new pavement delineation and no additional compensation will be allowed therefor.

Prior to applying Aggregate Base, Asphalt Concrete, Paving Oil or Asphaltic Emulsion (paint binder) the Contractor shall cover all manholes, valve and monument covers, grates, or other exposed facilities located within the area of application, using a plastic or oil resistant construction paper secured to the facility being covered by tape or adhesive. The covered facilities shall be referenced by the Contractor, with a sufficient number of control points to relocate the facilities after the asphalt concrete has been placed. After completion of the paving operation, all covers shall be removed and disposed of in a manner satisfactory to the Engineer. Full compensation for covering manholes, valve and monument covers, grates, or other exposed facilities, referencing, and removing temporary cover shall be considered as included in the contract price paid for per items of “Aggregate Base (Class 2)” and “Hot Mix Asphalt (Type A)” , and no additional compensation shall be allowed therefor.

Temporary railing (Type K) and temporary crash cushions shall be secured in place prior to commencing work for which the temporary railing and crash cushions are required.

10-1.04 STAGES OF CONSTRUCTION:

The work shall be performed in conformance with the stages of construction shown on the plans and described in these Special Provisions. The project will be done in four stages. Staging is further divided into three areas of work for staging of the project. They are as follows:

- stage 1 (construction), 2 (construction), 3 (construction) and 4 (construction);
- stage 1 (traffic), 2 (traffic), 3 (traffic) and 4 (traffic);
- stage 1A (utility), 1B (utility), 2 (utility) and 3 (utility).
In general the stage for traffic and utility relocation will occur during the equivalent stage for construction with some overlap into adjacent construction stages. However the routing of traffic and the placement of utilities for the bridge will have their own required sequence. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction.

The first stage shall be completed in the first year of construction. At the beginning of the first stage, a waterline utility shall be relocated and a construction access road with associated temporary construction bridge shall be constructed and installed. During the first stage one half of the proposed bridge shall be constructed upstream and adjacent to the existing bridge. Traffic will use the existing one lane bridge as a detour during the stage one. The roadway approaches to the upstream half of the bridge will be constructed at the end of the first stage. During the second stage the traffic shall be rerouted onto the newly constructed upstream half bridge using its one lane for detour. The existing bridge will then be removed. The remaining downstream half of the bridge shall then be constructed during the stage two. During the third stage the two halves of the bridge shall be combined with a closure pour. The roadway approaches to the downstream half of the bridge shall be constructed during the third stage. The fourth stage will begin after the full curing of the closure pour and the completion of the approaches. During the fourth stage the traffic shall be routed onto the downstream half of the bridge and the upstream pedestrian rail and bridge barrier rail shall be attached to the bridge deck. At the end of the fourth stage the bridge shall be opened up for full two lane traffic as a fully constructed bridge with approach travel ways. Various water utility movements shall be necessary during each stage of construction to provide continuous use by residents during construction.

The stage(construction) is shown on Sheet No. 32 “Stage Construction Sections” of the plans. It shows the order of construction for portions of the bridge and the required sequence of construction. The stage(traffic) is shown on Sheet No. 18 “Traffic Detour Plan” of the plans. It shows the required routing of traffic during the construction stages to provide continuous access across the Carmel River to traffic. The stage(utility) is shown on Sheets No. 14, 15, 16 and 17 “Utility Staging Plans”. They show the required routing and placement of the CalAm Waterlines, PG&E gas line and AT&T telephone line with reference to the stages of construction.

10-1.05 PERMIT LIMITS ON CONSTRUCTION WITHIN THE RIVER CHANNEL:

Attention is directed to "Environmentally Sensitive Area" and "Temporary Fence (Type ESA)" and Temporary Fence (Type BW) of these special provisions. Prior to beginning work, the boundaries of the Environmentally Sensitive Areas (ESA) will be delineated by the Engineer in the field. The Contractor shall install the temporary fence (Type ESA) as delineated by the Engineer and as shown on the plans.

Attention is directed to "Water Pollution Control" of these special provisions regarding the submittal and approval of the “Water Pollution Control Program” prior to performing work having potential to cause water pollution.

Construction of the bridge must comply with the following conditions:

**Mitigation from FONSI**

June 1 – October 31  
Restrict construction in River Channel or Riparian Areas.

April 1 – November 1  
Restrict work activities.
Department of Fish and Game Streambed Alteration Agreement
June 1 – October 31  Construction within jurisdictional streambed limit

Corps of Engineers
June 1 – October 15  Construction activities in the Carmel River limited to dry season.

NOAA Fisheries
June 1 – October 31  Construction within jurisdictional streambed limit.
June 1 – October 15  Construction involving instream work will be completed during low flow conditions.

10-1.06 PROJECT APPEARANCE:
The Contractor shall maintain a neat appearance to the work. In any area visible to the public, the following shall apply:

When practical, broken concrete shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of weekly.

The Contractor shall furnish trash bins for all debris from construction. Debris shall be placed in trash bins daily.

Throughout all phases of construction, including suspension of work and until final acceptance of the Project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.

Failure of the Contractor to comply with the Engineer’s clean up orders will result in an order to suspend the work until the condition is corrected. No additional compensation shall be allowed as a result of such suspension.

Clean up expenses to the County at various job sites because of the Contractor’s failure to comply with the provisions in the Standard Specifications and these Special Provisions shall be charged to the Contractor.

Full compensation for conforming to the provisions in this section not otherwise provided for shall be considered in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-1.07 WATER POLLUTION CONTROL:

GENERAL

Summary
Discharges of storm water from the project must comply with NPDES General Permit for "Storm Water Discharges Associated with Construction and Land Disturbance Activities" (Order No. 2009-009-DWQ, NPDES No. CAS0000002). Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems for:
1. Prepare Storm Water Pollution Prevention Plan. SWPPP preparation includes obtaining SWPPP acceptance, amending the SWPPP, preparing a CSMP and a SAP, and monitoring and inspecting WPC practices at the job site.

2. Storm Water Sampling and Analysis Day. Storm Water Sampling and Analysis Day includes reporting of storm water quality per qualifying rain event. If specified for the risk level, the work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents.


4. Rain Event Action Plan. If specified for the project risk level, REAP preparation includes preparing and submitting REAP forms and monitoring weather forecasts.

Do not start work until:

1. SWPPP is accepted
2. WDID is issued
3. SWPPP has been reviewed by the RWQCB. If the RWQCB requires time for SWPPP review, allow enough time for the RWQCB to review the SWPPP as specified under "Submittals" of these Special Provisions.

This Project was initially evaluated as a Risk Level 2 project by the County. The Contractor through their QSD shall make an independent determination of the Risk Level of the project.

Definitions and Abbreviations

**active and inactive areas:** (1) Active areas have soil disturbing work activities occurring at least once within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

**BMPs:** Best Management Practices are water pollution control practices.

**construction phase:** Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

**CSMP:** Construction Site Monitoring Program.

**NAL:** Numeric Action Level

**NEL:** Numeric Effluent Limit

**NPDES:** National Pollutant Discharge Elimination System

**NOI:** Notice of Intent

**normal working hours:** The hours you normally work on this project

**Preparation Manual:** The Department's "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

**QSD:** Qualified SWPPP Developer

**QSP:** Qualified SWPPP Practitioner

**REAP:** Rain Event Action Plan.

**RWQCB:** Regional Water Quality Control Board.

**SAP:** Sampling and Analysis Plan

**SSC:** Suspended Sediment Concentration

**SWWRCB:** State Water Resources Control Board

**SWPPP:** Storm Water Pollution Prevention Plan

**WDID:** Waste Discharge Identification Number

**WPC:** Water Pollution Control
**WPC Manager:** Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

**Submittals**

Within 20 days after contract approval, start the following process for SWPPP acceptance:

1. Submit 3 copies of the SWPPP and allow 20 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.
2. Change and resubmit the SWPPP within 15 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete SWPPP is resubmitted.
3. When the Engineer accepts the SWPPP, submit an electronic and 4 printed copies of the accepted SWPPP.
4. If the RWQCB reviews the accepted SWPPP, the Engineer submits one copy of the accepted SWPPP to the RWQCB for their review and comment. RWQCBs requiring 30 days to review SWPPPs include:
   4.1. Central Coast RWQCB
5. If the Engineer requests changes to the SWPPP based on RWQCB comments, amend the SWPPP within 10 days.

**Submit:**

1. Storm water training records including training dates and subjects for employees and subcontractors. Include dates and subjects for ongoing training, including tailgate meetings.
2. Employee training records:
   2.1. Within 5 days of SWPPP acceptance for existing employees
   2.2. Within 5 days of training for new employees
   2.3. At least 5 days before subcontractors start work for subcontractor's employees

Prepare a Storm Water Annual Report for the reporting period from July 1st to June 30th:

1. If construction occurs from July 1st through June 30th, submit the report no later than July 15th for the prior reporting period
2. If construction ends before June 30th, submit the report within 15 days after contract acceptance

Submit the Storm Water Annual Report as follows:

1. Submit 2 copies of the Storm Water Annual Report and allow 10 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.
2. Change and resubmit the Storm Water Annual Report within 5 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete Storm Water Annual Report is resubmitted.
3. When the Engineer accepts the Storm Water Annual Report, insert the WPC Manager's signed certification and the Engineer's signed certification.

Submit one electronic copy and 2 printed copies of the accepted Storm Water Annual Report.

Submit as required:

1. NAL Exceedance Reports
2. NEL Exceedance Reports
3. Visual Monitoring Reports
4. Inspection Reports
5. BMP Status Report
At least 5 days before operating any construction support facility:
1. Submit a plan showing the location and quantity of WPC practices associated with the construction support facility
2. If you will be operating a batch plant or a crushing plant under the General Industrial Permit, submit a copy of the NOI approved by the RWQCB and the SWPPP approved by the RWQCB

Quality Control and Assurance Training

Provide storm water training for:
1. Project managers
2. Supervisory personnel
3. Employees involved with WPC work

Train all employees, including subcontractor's employees, in the following subjects:
1. WPC rules and regulations
2. Implementation and maintenance for:
   2.1. Temporary Soil Stabilization
   2.2. Temporary Sediment Control
   2.3. Tracking Control
   2.4. Wind Erosion Control
   2.5. Material pollution prevention and control
   2.6. Waste management
   2.7. Non-storm water management
   2.8. Identifying and handling hazardous substances
   2.9. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Employees must receive initial WPC training before working on the job.

Conduct weekly training meetings covering:
1. WPC BMP deficiencies and corrective actions
2. BMPs that are required for work activities during the week
3. Spill prevention and control
4. Material delivery, storage, use, and disposal
5. Waste management
6. Non-storm water management procedures

Training for personnel to collect water quality samples must include:
1. SAP review
2. Health and safety review
3. Sampling simulations

A Storm Water Information Handout has been prepared for this contract and is available as described in "Project Information" of these Special Provisions.

If you operate construction support facilities, protect storm water systems or receiving waters from the discharge of potential pollutants by using WPC practices.

Construction support facilities include:
1. Staging areas
2. Storage yards for equipment and materials
3. Mobile operations
4. Batch plants for PCC and HMA
5. Crushing plants for rock and aggregate
6. Other facilities installed for your convenience such as haul roads

If you operate a batch plant to manufacture PCC, HMA, or other material; or a crushing plant to produce rock or aggregate; obtain coverage under the General Industrial General Permit. You must be covered under the General Industrial Permit for batch plants and crushing plants located:
   1. Outside of the job site
   2. Within the job site that serve one or more contracts

Discharges from manufacturing facilities such as batch plants must comply with the general waste discharge requirements for Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, issued by the SWRCB for "Discharge of Stormwater Associated with Industrial Activities Excluding Construction Activities." The General Industrial Permit is available at:
http://www.waterboards.ca.gov/

You may obtain copies of the Preparation Manual from the Publication Distribution Unit. The mailing address for the Publication Distribution Unit is:
State of California
Department of Transportation
Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, California 95815
Telephone: (916) 445-3520

For the Preparation Manual and other WPC references, go to the Department's "Construction Storm Water and Water Pollution Control" Web site at:

Water Pollution Control Manager

Assign one WPC Manager to implement the SWPPP. The WPC Manager must comply with the Permit (Order No. 2009-009-DWQ, NPDES No. CAS000002) qualifications for a QSP and a QSD. You may assign a different QSD to prepare the SWPPP.

The QSD must have the following qualifications:
   1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
   2. Registration or certification described in the Permit (Order No. 2009-009-DWQ, NPDES No. CAS000002)

The QSP must meet the qualifications of the QSD or have the following certifications:
   1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
   2. Certification described in the Permit
At the job site, the WPC Manager must:

1. Be responsible for WPC work
2. Be the primary contact for WPC work
3. Oversee the maintenance of WPC practices
4. Oversee and enforce hazardous waste management practices
5. Have the authority to mobilize crews to make immediate repairs to WPC practices
6. Ensure that all employees have current water pollution control training
7. Implement the accepted SWPPP and amend the SWPPP when required

WPC Manager must oversee:

1. Inspections of WPC practices identified in the SWPPP
2. Inspections and reports for visual monitoring
3. Preparation and implementation of REAPs
4. Sampling and analysis
5. NAL exceedance reports
6. NEL exceedance reports
7. SWPPP annual certification
8. Annual reports
9. BMP status reports

10-1.07A STORM WATER POLLUTION PREVENTION PLAN:

This work includes preparing a SWPPP including a CSMP, obtaining SWPPP acceptance, amending the SWPPP, inspecting and reporting on WPC practices at the job site. If specified by the risk level, the work includes preparing REAPs. The SWPPP must comply with the Preparation Manual and the Permit. The SWPPP must be submitted in place of the water pollution control program under Section 7-1.01G, "Water Pollution," of the Standard Specifications.

You may request, or the Engineer may order, changes to the WPC work. Changes may include the addition of new WPC practices. Additional WPC work will be paid for as extra work under Section 4-1.03D, "Extra Work," of the Standard Specifications.

The SWPPP must include sections as specified for the project risk level as follows:

1. For risk level 1:
   1.1. Schedule
   1.2. CSMP
2. For risk level 2:
   2.1. Schedule
   2.2. CSMP
   2.3. Adherence to Effluent Standards for NALs
   2.4. REAP
3. For risk level 3:
   3.1. Schedule
   3.2. CSMP
   3.3. Adherence to Effluent Standards for NALs and NELs
   3.4. REAP

The SWPPP must include WPC practices:
1. For storm water and non-stormwater from areas outside of the job site related to project work activities such as:
   1.1. Staging areas
   1.2. Storage yards
   1.3. Access roads
2. For activities or mobile operations related to contractor obtained NPDES permits
3. Construction support facilities

The SWPPP must include a copy of permits obtained by the Department such as Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 Certifications, and RWQCB Waste Discharge Requirements for Aerially Deposited Lead Reuse. Amend the SWPPP annually and resubmit it by July 15th. Amend the SWPPP if:
1. Changes in work activities could affect the discharge of pollutants
2. WPC practices are added by change order work
3. WPC practices are added at your discretion
4. Changes in the amount of disturbed soil are substantial
5. Objectives for reducing or eliminating pollutants in storm water discharges have not been achieved
6. There is a Permit violation

Whenever you amend the SWPPP, follow the same process specified for SWPPP acceptance. Retain a printed copy of the accepted SWPPP at the job site.

**SWPPP Schedule**

The SWPPP schedule must:
1. Describe when work activities will be performed that could cause the discharge of pollutants into storm water
2. Describe WPC practices associated with each construction phase
3. Identify soil stabilization and sediment control practices for disturbed soil areas

**Construction Site Monitoring Program (CSMP)**

The QSD must prepare a CSMP as part of the SWPPP. The CSMP must be developed before starting work and be revised to reflect current construction activities as necessary. The CSMP must include sections for the project risk level as follows:
1. For risk level 1:
   1.1. Visual Monitoring
   1.2. SAP for Non-Visible Pollutants
2. For risk level 2:
   2.1. Visual Monitoring
   2.2. SAP for Non-Visible Pollutants
   2.3. SAP for sediment and turbidity
   2.4. SAP for pH
3. For risk level 3:
   3.1. Visual Monitoring
   3.2. SAP for Non-Visible Pollutants
   3.3. SAP for sediment and turbidity
   3.4. SAP for pH
3.5. Receiving Water Sampling
3.6. SAP for temporary active treatment systems

Visual Monitoring

The WPC Manager must oversee the performance of visual inspections for qualifying rain events. A qualified rain event is a storm that produces at least 0.5 inches of precipitation with a 48 hour or greater period between storms.
For each qualifying rain event, perform visual inspections and record observations during normal working hours as follows:
1. Record the time, date, and rain gauge reading
2. Observe:
   2.1. Within 2 days before the storm:
      2.1.1. Drainage areas for spills, leaks, or uncontrolled pollutants
      2.1.2. Proper implementation of WPC practices
      2.1.3. Storm water storage areas for leaks and adequate freeboard
   2.2. Every 24 hours during the storm:
      2.2.1. WPC practices for effective operation
      2.2.2. WPC practices needing maintenance and repair
   2.3. Within 2 days after the storm event:
      2.3.1. Discharge locations
      2.3.2. WPC practices to evaluate the design, implementation, and effectiveness
      2.3.3. To identify where additional WPC practices may be needed

Perform non-stormwater discharge visual inspections as follows:
1. At least once during each of the following periods:
   1.1. January through March
   1.2. April through June
   1.3. July through September
   1.4. October through December
2. Observe flowing and contained storm water for the presence of floating and suspended materials, sheen on the surface, discoloration, turbidity, odors, and sources of observed pollutants
3. Observe the job site for the presence of authorized and unauthorized non-stormwater discharges and their sources

The WPC Manager must prepare visual inspection reports that include the following:
1. Name of personnel performing the inspection, inspection date, and date inspection report completed
2. Storm and weather conditions
3. Locations and observations
4. Corrective actions taken

Maintain visual inspections reports at the job site as part of the SWPPP.

Sampling and Analysis

General
   Include a SAP in the CSMP to monitor the effectiveness of WPC practices.
The SAP must comply with the Preparation Manual.
Assign trained personnel to collect water quality samples. Document their training in the SAP.
Describe the following water quality sampling procedures in the SAP:

1. Sampling equipment
2. Sample preparation
3. Collection
4. Field measurement methods
5. Analytical methods
6. Quality assurance and quality control
7. Sample preservation and labeling
8. Collection documentation
9. Sample shipping
10. Chain of custody
11. Data management and reporting
12. Precautions from the construction site health and safety plan
13. Laboratory selection and certifications

Whenever assigned field personnel take samples, comply with the equipment manufacturer's recommendation for collection, analysis methods, and equipment calibration. Samples taken for laboratory analysis must follow water quality sampling procedures and be analyzed by a State-certified laboratory under 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants."
The SAP must identify the State-certified laboratory, sample containers, preservation requirements, holding times, and analysis method. For a list of State-certified laboratories go to: http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx

Obtain, install, and maintain a rain gauge at the job site. Observe and record daily precipitation. Document sample collection during precipitation.

You are not required to physically collect samples under the following conditions:
1. During dangerous weather conditions such as flooding or electrical storms
2. Outside of normal working hours

Retain water quality sampling documentation and analytical results with the SWPPP at the job site. Show pollutant sampling locations on SWPPP drawings.
If discharges or sampling locations change because of changed work activities or knowledge of site conditions, amend the SAP.
If the job is risk level 2 or risk level 3, collect and analyze at least 3 samples for each day of each qualifying rain event. Collect effluent samples at all locations where the storm water is discharged off-site.

Analytical Results and Evaluation

Submit an electronic copy (in file format .xls, .txt, .csv, .dbs, or .mdb) and a printed copy of water quality analytical results, and quality assurance and quality control within 48 hours of field analysis sampling, and within 30 days for laboratory analysis. Also provide an evaluation of whether the downstream samples show levels of the tested parameter that are higher than the control sample.
Electronic water quality analysis results must have the following information:
1. Sample identification number
2. Contract number
3. Constituent
4. Reported value
5. Analytical method
6. Method detection limit
7. Reported limit

If downstream samples show increased levels, assess WPC practices, site conditions, and surrounding influences to determine the probable cause for the increase.

SAP for Non-Visible Pollutants

The SAP must include a description of the sampling and analysis strategy for monitoring non-visible pollutants.

The SAP must identify potential non-visible pollutants present at the job site associated with any of the following:

1. Construction materials and waste
2. Existing contamination due to historical site usage
3. Application of soil amendments, including soil stabilization materials, with the potential to change pH or contribute toxic pollutants to storm water

SWPPP drawings must show the locations planned for storage and use of potential non-visible pollutants.

The SAP must include sampling procedures for the following conditions when observed during a storm water visual inspection. For each of the following, collect at least one sample for each qualifying storm event:

1. Materials or waste containing potential non-visible pollutants that are not stored under watertight conditions,
2. Materials or waste containing potential non-visible pollutants that are stored under watertight conditions, but a breach, leakage, malfunction, or spill is observed; the leak or spill has not been cleaned up before precipitation; and material or waste could discharge non-visible pollutants to surface waters or drainage system,
3. Chemical applications, including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or non-pigmented curing compound used during precipitation or within 24 hours preceding precipitation, and could discharge pollutants to surface waters or drainage system,
4. Applied soil amendments, including soil stabilization materials that could change pH levels or contribute toxic pollutants to storm water runoff and discharge pollutants to surface waters or drainage system, unless available independent test data indicates acceptable concentrations of non-visible pollutants in the soil amendment,
5. Storm water runoff from an area contaminated by historical usage of the site that could discharge pollutants to surface waters or drainage systems.

The SAP must provide sampling procedures and schedule for:

1. Sample collection during the first 2 hours of each rain event that generate runoff
2. Sample collection during normal working hours
3. Each non-visible pollutant source
4. Uncontaminated control sample.

The SAP must identify locations for sampling downstream and control samples, and reasons for selecting those locations. Select control sample locations where the sample will not come in contact
with materials, waste, or areas associated with potential non-visible pollutants or disturbed soil areas.

**SAP for Sediment and Turbidity**

If the job is risk level 2 or risk level 3, sample and analyze for turbidity:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Detection Limit (Min)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity</td>
<td>Field test with calibrated portable instrument</td>
<td>1</td>
<td>NTU</td>
</tr>
</tbody>
</table>

If the job is risk level 3 and the turbidity NEL has been exceeded, sample and analyze for SSC:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Detection Limit (Min)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC</td>
<td>ASTM Method D3977-97</td>
<td>5</td>
<td>Mg/L</td>
</tr>
</tbody>
</table>

**SAP for pH**

If the job is risk level 2 or risk level 3, sample and analyze for pH:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Detection Limit (Min)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Field test with calibrated portable instrument</td>
<td>0.2</td>
<td>pH units</td>
</tr>
</tbody>
</table>

**Receiving Water Sampling**

If the job is risk level 3, obtain samples from representative and accessible locations:
1. Upstream of the discharge point
2. Downstream of the discharge point

Show receiving water sampling locations on SWPPP drawings.
If there are several discharge points, obtain samples from a single upstream and a single downstream location.

**Rain Event Action Plan (REAP)**

The WPC Manager must submit a REAP to protect the job site at least 48 hours before a predicted rain event.
Prepare a REAP when National Weather Service is predicting at least a 50 percent probability of precipitation within 72 hours.
For the REAP, use approved forms and include:
1. Site location
2. Risk level
3. Contact information including 24-hour emergency phone numbers for:
   3.1. WPC Manager
   3.2. Erosion and sediment control providers or subcontractors
   3.3. Storm water sampling providers or subcontractors
4. Storm Information
5. Construction phase information for:
   5.1. Highway Construction including active and inactive areas for work activities for building roads and structures
   5.2. Plant Establishment including maintenance on vegetation installed for final stabilization where areas are inactive
   5.3. Suspension where work activities are suspended and areas are inactive
6. Construction phase information including:
   6.1. Construction activities
   6.2. Subcontractors and trades on the job site
   6.3. Pre-storm activities including:
      6.3.1. Responsibilities of the WPC Manager
      6.3.2. Responsibilities of the crew and crew size
      6.3.3. Stabilization for active and inactive disturbed soil areas
      6.3.4. Stockpile management
      6.3.5. Corrective actions taken for deficiencies identified during pre-storm visual inspection
   6.4. Activities to be performed during storm events including:
      6.4.1. Responsibilities of the WPC Manager
      6.4.2. Responsibilities of the crew and crew size
      6.4.3. BMP maintenance and repair
   6.5. Description of flood contingency measures

You must have the REAP onsite at least 24 hours before a predicted rain event. A printed copy of each REAP must be at the job site as part of the SWPPP. Implement the REAP including mobilizing crews to complete activities no later than 24 hours before precipitation occurs.

10-1.07B IMPLEMENTATION REQUIREMENTS:

Monitor the National Weather Service Forecast Office on a daily basis. For forecasts, go to:
http://www.srh.noaa.gov/forecast

Whenever you or the Engineer identifies a deficiency in the implementation of the accepted SWPPP:
   1. Correct the deficiency immediately, unless the Engineer authorizes an agreed date for correction
   2. Correct the deficiency before precipitation occurs

If you fail to correct the deficiency by the agreed date or before the onset of precipitation, the Department may correct the deficiency and deduct the cost of correcting the deficiency from payment. Continue SWPPP implementation during any temporary suspension of work activities. Install WPC practices within 15 days or before predicted precipitation, whichever occurs first.

Numeric Action Levels (NALs)

If the job is risk level 2 or risk level 3, then it is subject to NALs:
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Detection Limit (Min)</th>
<th>Unit</th>
<th>Numeric Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Field test with calibrated portable instrument</td>
<td>0.2</td>
<td>pH units</td>
<td>Lower NAL = 6.5, Upper NAL = 8.5</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Field test with calibrated portable instrument</td>
<td>1</td>
<td>NTU</td>
<td>250 NTU</td>
</tr>
</tbody>
</table>

**Numeric Effluent Limits (NELs)**

If the job is risk level 3, then it is subject to NELs:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Detection Limit (Min)</th>
<th>Unit</th>
<th>Numeric Effluent Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Field test with calibrated portable instrument</td>
<td>0.2</td>
<td>pH units</td>
<td>Lower NEL = 6.0, Upper NEL = 9.0</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Field test with calibrated portable instrument</td>
<td>1</td>
<td>NTU</td>
<td>500 NTU</td>
</tr>
</tbody>
</table>

The storm event daily average for storms up to the 5-year, 24-hour storm, must not exceed the NEL for turbidity. The daily average sampling results must not exceed the NEL for pH.

**Inspection**

The WPC Manager must oversee inspections for WPC practices identified in the SWPPP:
1. Before a forecasted storm
2. After precipitation that causes site runoff
3. At 24-hour intervals during extended precipitation
4. On a predetermined schedule, a minimum of once a week

The WPC Manager must oversee daily inspections of:
1. Storage areas for hazardous materials and waste
2. Hazardous waste disposal and transporting activities
3. Hazardous material delivery and storage activities
4. WPC practices specified under "Construction Site Management" of these Special Provisions

The WPC Manager must use the Storm Water Site Inspection Report provided in the Preparation Manual.
The WPC Manager must prepare BMP status reports that include the following:
1. Location and quantity of installed WPC practices
2. Location and quantity of disturbed soil for the active or inactive areas

Within 24 hours of finishing the weekly inspection, the WPC Manager must submit:
1. Copy of the completed site inspection report
2. Copy of the BMP status report
10-1.07C REPORTING REQUIREMENTS:

Storm Water Annual Report

The WPC Manager must prepare a Storm Water Annual Report. The report must:
1. Use an approved report format
2. Include project information including description and location
3. Include storm water monitoring information including:
   3.1. Summary and evaluation of sampling and analysis results including laboratory reports
   3.2. Analytical methods, reporting units, detections limits for analytical parameters
   3.3. Summary of corrective actions
   3.4. Identification of corrective actions or compliance activities that were not implemented
   3.5. Summary of violations
   3.6. Names of individuals performing storm water inspections and sampling
   3.7. Logistical information for inspections and sampling including location, date, time, and precipitation
   3.8. Visual observations and sample collection records
4. Include documentation on training for:
   4.1. Individuals responsible for NPDES permit compliance
   4.2. Individuals responsible for BMP installation, inspection, maintenance, and repair
   4.3. Individuals responsible for preparing, revising, and amending the SWPPP

NAL Exceedance Report

If the job is risk level 2 or risk level 3 and an effluent sample exceeds a NAL, notify the Engineer and submit a NAL Exceedance Report no later than 48 hours after the conclusion of the storm event. The report must:
1. Include the following field sampling results and inspections:
   1.1. Analytical methods, reporting units, and detection limits
   1.2. Date, location, time of sampling, visual observation and measurements
   1.3. Quantity of precipitation of the storm event
2. Description of BMPs and corrective actions taken to manage NAL exceedance

NEL Violation Report

If the job is risk level 3 and an NEL is exceeded, notify the Engineer and submit a NEL Violation Report within 6 hours. The report must:
1. Include the following field sampling results and inspections:
   1.1. Analytical methods, reporting units, and detection limits
   1.2. Date, location, time of sampling, visual observations and measurements
   1.3. Quantity of precipitation of the storm event
2. Description of BMPs and corrective actions taken to manage NEL exceedance

If the job is risk level 2 or risk level 3, submit all sampling results to the Engineer no later than 48 hours after the conclusion of a storm event.
10-1.07D PAYMENT:

The contract lump sum price paid for "Prepare Storm Water Pollution Prevention Program" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing, obtaining acceptance of, and amending the SWPPP and CSMP, inspecting water pollution control practices, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

For projects with 60 working days or less, payments for SWPPP are made as follows:
1. After the Engineer accepts the SWPPP, the Department includes up to 75 percent of the bid item price in the monthly progress estimate
2. After contract acceptance, the Department pays for the remaining percentage of the bid item price

For projects with more than 60 working days, payments for SWPPP are made as follows:
1. After the Engineer accepts the SWPPP, the Department includes up to 50 percent of the bid item price in the monthly progress estimate
2. The Department pays 40 percent of the bid item price over the life of the contract
3. After contract acceptance, the Department pays for the remaining 10 percent of the bid item

The Department pays $500 for each Rain Event Action Plan submitted. The contract unit price paid for Rain Event Action Plan includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparation and submittal of REAP forms, and monitoring weather forecasts as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

The Department does not adjust payment for an increase or decrease in the quantity of rain event action plans submitted. Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications does not apply.

The Department pays $2,000 for each Storm Water Annual Report submitted. The contract unit price paid for "Water Pollution Control" includes full compensation for doing all the work involved in submitting the completed Storm Water Annual Report.

The Department does not adjust payment for an increase or decrease in the quantity of storm water annual reports submitted. Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications does not apply.

The work to complete the final Storm Water Annual Report is excluded from Section 7-1.17, "Acceptance of Contract," of the Standard Specifications.

The contract unit price paid for "Water Pollution Control" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparation, collection, analysis, and reporting of storm water samples per qualifying rain event as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

The Department does not adjust payment for an increase or decrease in the quantity of storm water sampling and analysis. Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications does not apply.

You may request or the Engineer may order laboratory analysis of storm water samples. Laboratory analysis of storm water samples will be paid for as extra work under Section 4-1.03D, "Extra Work," of the Standard Specifications.

The Department does not pay for the preparation, collection, laboratory analysis, and reporting of storm water samples for non-visible pollutants if WPC practices are not implemented before precipitation or if
a failure of a WPC practice is not corrected before precipitation.
The Department does not pay for implementation of WPC practices in areas outside the highway right-
of-way not specifically provided for in the drawings or in the Special Provisions.
The Department does not pay for WPC practices installed at your construction support facilities.
WPC practices for which there are separate bid items of work are measured and paid for as those bid
items of work.
For each failure to submit a completed Storm Water Annual Report, the Department withholds $10,000.
This withhold is in addition to other withholds under Section 9-1.07E(3) "Performance Failure
Each failure to comply with any part of these Special Provisions and each failure to implement water
pollution control practices are considered separate performance failures.

10-1.08 CONSTRUCTION SITE MANAGEMENT:
GENERAL

Summary

This work includes controlling potential sources of water pollution before they come in contact with
storm water systems or watercourses.
Control material pollution and manage waste and non-stormwater at the job site by implementing
effective handling, storage, use, and disposal practices.
For information on documents specified in these Special Provisions, refer to the Department's
Preparation Manual, Dewatering Guide, and BMP Manual are available from the Department's
Construction Storm Water and Water Pollution Control web site at:

Definitions and Abbreviations

active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once
within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.
CDPH: California Department of Public Health
ELAP: Environmental Laboratory Accreditation Program
minor spills: Small quantities of oil, gasoline, paint, or other material that are small enough to be
controlled by a first responder upon discovery of the spill.
MSDS: Material Safety Data Sheet
Preparation Manual: The Department's Storm Water Pollution Prevention Plan (SWPPP) and Water
Pollution Control Program (WPCP) Preparation Manual.
semi-significant spills: Spills that can be controlled by a first responder with help from other personnel.
significant or hazardous spills: Spills that cannot be controlled by construction personnel.
WPC: Water Pollution Control
WPC Manager: Water Pollution Control Manager as defined under "Water Pollution Control" of these
Special Provisions.

Submittals

Submit the following:

1. MSDS at least 5 days before material is used or stored
2. Monthly inventory records for material used or stored
3. Copy of written approval to discharge into a sanitary sewer system at least 5 days before beginning discharge activities

Quality Control and Assurance

Not Used

MATERIALS
Not Used

CONSTRUCTION

Spill Prevention and Control

Implement spill and leak prevention procedures for chemicals and hazardous substances stored at the job site. If you spill or leak chemicals or hazardous substances at the job site, you are responsible for all associated cleanup costs and related liability.

As soon as it is safe, contain and clean up spills of petroleum products, sanitary and septic waste substances listed under CFR Title 40, Parts 110, 117, and 302.

Minor Spills
Clean up minor spills using the following procedures:
1. Contain the spread of the spill
2. Recover the spilled material by absorption
3. Clean the contaminated area
4. Dispose of the contaminated material promptly and properly

Semi-significant Spills
Clean up semi-significant spills immediately by the following procedures:
1. Contain the spread of the spill
2. Recover the spilled material using absorption whenever a spill occurs on a paved surface or an impermeable surface
3. Contain the spill with an earthen dike and dig up the contaminated soil for disposal whenever a spill occurs on soil
4. If the spill occurs during precipitation, cover the spill with plastic or other material to prevent contaminated runoff
5. Dispose of the contaminated material promptly and properly

Significant or Hazardous Spills
Immediately notify qualified personnel of significant or hazardous spills. Do not let construction personnel attempt to clean up the spill until qualified staff has arrived. Do the following:
1. Notify the Engineer and follow up with a written report
2. Obtain the services of a spills contractor or hazardous material team immediately
3. Notify the local emergency response team by dialing 911 and county officials at the emergency phone numbers kept at the job site
4. Notify the Governor's Office of Emergency Services Warning Center at (805) 852-7550
5. Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under CFR Title 40, Parts 110, 119, and 302
6. Notify other agencies as appropriate, including:
   6.1. Fire Department
   6.2. Public Works Department
   6.3. Coast Guard
   6.4. Highway Patrol
   6.5. City Police or County Sheriff Department
   6.6. Department of Toxic Substances
   6.7. California Division of Oil and Gas
   6.8. Cal OSHA
   6.9. Regional Water Resources Control Board

Report minor, semi-significant, and significant spills to the WPC Manager. The WPC Manager must notify the Engineer immediately. The WPC Manager must oversee and enforce proper spill prevention and control measures.
Prevent spills from entering storm water runoff before and during cleanup. Do not bury spills or wash spills with water.
Keep material or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material being stored.

Material Management

General
Material must be delivered, used, and stored for this job in a way that minimizes or eliminates discharge of material into the air, storm drain systems, and watercourses.
Implement the practices described under "Material Management" of these Special Provisions while taking delivery of, using, or storing any of the following materials:
   1. Hazardous chemicals including acids, lime, glues, adhesives, paints, solvents, and curing compounds
   2. Soil stabilizers and binders
   3. Fertilizers
   4. Detergents
   5. Plaster
   6. Petroleum materials including fuel, oil, and grease
   7. Asphalt components and concrete components
   8. Pesticides and herbicides

Employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.
If practicable, use less hazardous materials.

Material Storage
Use the following material storage procedures:
   1. Store liquids, petroleum materials, and substances listed in CFR Title 40, Parts 110, 117, and 302 as specified by the Department, and place them in secondary containment facilities.
   2. Secondary containment facilities must be impervious to the materials stored there for a minimum contact time of 72 hours.
   3. Cover secondary containment facilities during non-working days and when precipitation is predicted. Secondary containment facilities must be adequately ventilated.
   4. Keep secondary containment facility free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place into drums within 24 hours.
Handle these liquids as hazardous waste under "Hazardous Waste" of these Special Provisions unless testing determines them to be non-hazardous.

5. Do not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.

6. Store materials in the original containers with the original material labels maintained in legible condition. Replace damaged or illegible labels immediately.

7. Secondary containment facilities must have the capacity to contain precipitation from a 24-hour-long, 25-year storm, and 10 percent of the aggregate volume of all containers, or entire volume of the largest container within the facility, whichever is greater.

8. Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during non-working days and while precipitation is predicted.

9. Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well organized, and equipped with cleanup supplies appropriate for the materials being stored.

10. Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation, and at least weekly during other times.

Stockpile Management

Use the following stockpile management procedures:

1. Reduce or eliminate potential water pollution from stockpiled material including soil, paving material, and pressure treated wood.

2. Locate stockpiles:
   2.1. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, and inlets unless approved
   2.2. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, and inlets unless approved

Install WPC practices within 15 days or before predicted precipitation, whichever occurs first.
Active and inactive soil stockpiles must be:

1. Covered with soil stabilization measures, plastic sheeting, or geosynthetic fabric
2. Surrounded with a linear sediment barrier

Portland cement concrete rubble, AC, HMA, AC and HMA rubble, aggregate base or aggregate sub-base stockpiles must be:

1. Covered with plastic sheeting, or geosynthetic fabric
2. Surrounded with a linear sediment barrier

Pressure treated wood stockpiles must be:

1. Placed on pallets
2. Covered with impermeable material

Cold mix asphalt concrete stockpiles must be:

1. Placed on impervious surface
2. Covered with impermeable material
3. Protected from run-on and runoff

Control wind erosion year round under Section 10, "Dust Control" of the Standard Specifications. Repair or replace linear sediment barriers and covers as needed to keep them functioning properly. If
sediment accumulates to 1/3 of the linear sediment barrier height, remove the sediment.

**Waste Management**

**Solid Waste**
Do not allow litter or debris to accumulate anywhere at the job site, including storm drain grates, trash racks, and ditch lines. Pick up and remove trash and debris from the job site at least once a week. The WPC Manager must monitor solid waste storage and disposal procedures at the job site. If practicable, recycle non-hazardous job site waste and excess material. If recycling is not practicable, disposal must comply with Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications. Furnish enough closed-lid dumpsters of sufficient size to contain any solid waste generated by work activities. When the refuse reaches the fill line, empty the dumpsters. Dumpsters must be watertight. Do not wash out dumpsters at the job site. Furnish additional containers and pick up dumpsters more frequent during the demolition phase of construction.

Solid waste includes:
1. Brick  
2. Mortar  
3. Timber  
4. Metal scraps  
5. Sawdust  
6. Pipe  
7. Electrical cuttings  
8. Non-hazardous equipment parts  
9. Styrofoam and other packaging materials  
10. Vegetative material and plant containers from highway planting  
11. Litter and smoking material, including litter generated randomly by the public  
12. Other trash and debris

Furnish and use trash receptacles at the job site yard, field trailers, and locations where workers gather for lunch and breaks.

**Hazardous Waste**
Use hazardous waste management practices if waste is generated at the job site from the following substances:
1. Petroleum products  
2. Asphalt products  
3. Concrete curing compound  
4. Pesticides  
5. Acids  
6. Paints  
7. Stains  
8. Solvents  
9. Wood preservatives and treated posts  
10. Roofing tar  
11. Road flares  
12. Lime  
13. Glues and adhesives
14. Materials classified as hazardous by California Code of Regulations, Title 22, Division 4.5; or listed in CFR Title 40, Parts 110, 117, 261, or 302

The WPC Manager must oversee and enforce hazardous waste management practices. Minimize the production of hazardous materials and hazardous waste at the job site. If damaged, repair or replace perimeter controls, containment structures, and covers.

If hazardous material levels are unknown, use a laboratory certified by ELAP under CDPH to sample and test waste to determine safe methods for storage and disposal.

Separate potentially hazardous waste from non-hazardous waste at the job site. Hazardous waste must be handled, stored, and disposed of under California Code of Regulations, Title 22, Division 4.5, Section 66262.34; and in CFR Title 49, Parts 261, 262, and 263.

Store hazardous waste in sealed containers constructed and labeled with the contents and date accumulated under California Code of Regulations, Title 22, Division 4.5; and in CFR Title 49, Parts 172, 173, 178, and 179. Keep hazardous waste containers in temporary containment facilities under "Material Storage" of these Special Provisions.

Furnish containers with adequate storage volume at convenient locations for hazardous waste collection. Do not overfill hazardous waste containers. Do not mix hazardous waste. Do not allow potentially hazardous waste to accumulate on the ground. Store containers of dry waste that are not watertight on pallets. Store hazardous waste away from storm drains, watercourses, moving vehicles, and equipment.

Clean water based or oil based paint from brushes or equipment within a contained area and in a way that does not contaminate soil, watercourses, and storm drain systems. Handle and dispose of the following as hazardous waste: paints, thinners, solvents, residues, and sludge that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste: dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths.

Dispose of hazardous waste within 90 days of being generated. Use a licensed hazardous waste transporter to take hazardous waste to a Class I Disposal Site. Submit a copy of uniform hazardous waste manifest forms within 24 hours of transporting hazardous waste.

The WPC Manager must inspect the following daily:

1. Storage areas for hazardous materials and waste
2. Hazardous waste disposal and transporting activities
3. Hazardous material delivery and storage activities

Contaminated Soil

Identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination must be sampled and tested by a laboratory certified by ELAP.

If levels of contamination are found to be hazardous, handle and dispose of the soil as hazardous waste. Prevent the flow of water, including ground water, from mixing with contaminated soil by using one or a combination of the following measures:

1. Berms
2. Cofferdams
3. Grout curtains
4. Freeze walls
5. Concrete seal course

If water mixes with contaminated soil and becomes contaminated, sample and test the water using a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the water as hazardous waste.
Concrete Waste
Use practices that will prevent the discharge of portland cement concrete, AC, or HMA waste into storm drain systems or watercourses.
Collect and dispose of portland cement concrete, AC, or HMA waste at locations where:
1. Concrete material, including grout, is used
2. Concrete dust and debris result from demolition
3. Sawcutting, coring, grinding, grooving, or hydro-concrete demolition of portland cement concrete, AC, or HMA creates a residue or slurry
4. Concrete truck or other concrete-coated equipment is cleaned at the job site

Sanitary and Septic Waste
Do not bury or discharge wastewater from sanitary or septic systems within Department right-of-way. The WPC Manager must inspect sanitary or septic waste storage and monitor disposal procedures at least weekly. Sanitary facilities that discharge to the sanitary sewer system must be properly connected and free from leaks. Place sanitary facilities at least 50 feet away from storm drains, watercourses, and flow lines.
Obtain written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system, and submit a copy to the Engineer.
Comply with local health agency provisions while using an on-site disposal system.

Liquid Waste
Use practices that will prevent job site liquid waste from entering storm drain systems or watercourses.
Liquid waste includes the following:
1. Drilling slurries or fluids
2. Grease-free or oil-free wastewater or rinse water
3. Dredgings, including liquid waste from drainage system cleaning
4. Liquid waste running off a surface including wash or rinse water
5. Other non-stormwater liquids not covered by separate permits

Hold liquid waste in structurally sound, leak proof containers such as:
1. Roll-off bins
2. Portable tanks

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills and leaks.
Store containers:
1. At least 50 feet from moving vehicles and equipment
2. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
3. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

Remove and dispose of deposited solids from sediment traps under "Solid Waste" of these Special Provisions unless the Engineer approves another method.
Liquid waste may require testing to determine hazardous material content before disposal.
Drilling fluids and residue must be disposed of outside the highway right-of-way.
If an approved location is available within the job site, fluids and residue exempt under California Code of Regulations, Title 23, Section 2511(g) may be dried by evaporation in a leak proof container. Dispose
of remaining solid waste under "Solid Waste" of these Special Provisions.

10-1.08A NON-STORM WATER MANAGEMENT:

Water Control and Conservation
Manage water used for work activities to prevent erosion or discharge of pollutants into storm drain systems or watercourses. Obtain approval before washing anything at the job site with water that could discharge into a storm drain system or watercourse. Report discharges immediately. If water is used at the job site, implement water conservation practices. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off water source to broken lines, sprinklers, or valves, and repair breaks within 24 hours. If possible, reuse water from waterline flushing for landscape irrigation. Sweep and vacuum paved areas; do not wash them with water. Direct job site water runoff, including water from water line repair, to areas where it can infiltrate into the ground and not enter storm drain systems or watercourses. Do not allow spilled water to escape water truck filling areas. If possible, direct water from off-site sources around the job site. Minimize the contact of off-site water with job site water.

Illegal Connection and Discharge Detection and Reporting
Inspect the job site and the site perimeter before starting work for evidence of illegal connections, discharges, or dumping. After starting work, inspect the job site and perimeter on a daily schedule. Whenever illegal connections, discharges, or dumping are discovered, notify the Engineer immediately. Take no further action unless ordered by the Engineer. Assume unlabeled or unidentifiable material is hazardous.
Look for the following evidence of illegal connections, discharges, or dumping:
1. Debris or trash piles
2. Staining or discoloration on pavement or soils
3. Pungent odors coming from drainage systems
4. Discoloration or oily sheen on water
5. Stains or residue in ditches, channels or drain boxes
6. Abnormal water flow during dry weather
7. Excessive sediment deposits
8. Nonstandard drainage junction structures
9. Broken concrete or other disturbances near junction structures

Vehicle and Equipment Cleaning
Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. Notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam. Contain and recycle or dispose of resulting waste under "Liquid Waste" or "Hazardous Waste" of these Special Provisions, whichever is applicable. Do not use diesel to clean vehicles or equipment, and minimize the use of solvents. Clean or wash vehicles and equipment in a structure equipped with disposal facilities. If using a structure is not possible, clean or wash vehicles and equipment in an outside area. The outside area must be:
1. Paved with AC, HMA, or concrete paving
2. Surrounded by a containment berm
3. Equipped with a sump to collect and dispose of wash water
4. If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved.
5. If outside the floodplain, located at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

When washing vehicles or equipment with water, use as little water as possible. Hoses must be equipped with a positive shutoff valve. Discharge liquid from wash racks to a recycle system or to another approved system. Remove liquids and sediment as necessary. The WPC Manager must inspect vehicle and equipment cleaning facilities:
1. Daily if vehicle and equipment cleaning occurs daily
2. Weekly if vehicle and equipment cleaning does not occur daily

Vehicle and Equipment Fueling and Maintenance
If practicable, perform maintenance on vehicles and equipment off the job site. If fueling or maintenance must be done at the job site, designate a site, or sites, and obtain approval before using. Minimize mobile fueling or maintenance. If vehicle and equipment fueling and maintenance must be done at the job site, areas for the following activities must be:
1. On level ground
2. Protected from storm water run-on
3. If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
4. If outside the floodplain, located at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

Use containment berms or dikes around the fueling and maintenance area. Keep adequate quantities of absorbent spill cleanup material and spill kits in the fueling and maintenance area and on fueling trucks. Dispose of spill cleanup material and kits immediately after use. Use drip pans or absorbent pads during fueling or maintenance. Fueling or maintenance activities must not be left unattended. Fueling nozzles must be equipped with an automatic shutoff control. Vapor recovery fueling nozzles must be used where required by the Air Quality Management District. When not in use, nozzles must be secured upright. Do not top-off fuel tanks. Recycle or properly dispose of used batteries and tires. The WPC Manager must inspect vehicle and equipment maintenance and fueling areas:
1. Daily when vehicle and equipment maintenance and fueling occur daily
2. Weekly when vehicle and equipment maintenance and fueling do not occur daily

The WPC Manager must inspect vehicles and equipment at the job site for leaks and spills on a daily schedule. Operators must inspect vehicles and equipment each day of use. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

Material and Equipment Used Over Water
Place drip pans and absorbent pads under vehicles or equipment used over water. Keep an adequate supply of spill cleanup material with the vehicle or equipment. If the vehicle or equipment will be idle for more than one hour, place drip pans or plastic sheeting under the vehicle or equipment on docks, barges, or other surfaces over water. Furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools. Secure material to prevent spills or discharge into water due to wind.
Structure Removal Over or Adjacent to Water
Do not allow demolished material to enter storm water systems or watercourses. Use approved covers and platforms to collect debris. Use attachments on equipment to catch debris on small demolition activities. Empty debris catching devices daily and handle debris under "Waste Management" of these Special Provisions.
The WPC Manager must inspect demolition sites within 50 feet of storm water systems or watercourses daily.

Paving, Sealing, Sawcutting, Grooving, and Grinding Activities
Prevent the following materials from entering storm drain systems or water courses:
1. Cementitious material
2. Asphaltic material
3. Aggregate or screenings
4. Grinding grooving, or sawcutting residue
5. Pavement chunks
6. Shoulder backing
7. Methacrylate

Cover drainage inlets and use linear sediment barriers to protect downhill watercourses until paving, sealing, sawcutting, grooving, or grinding activities are completed and excess material has been removed. Cover drainage inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.
If precipitation is predicted, limit paving, sawcutting, and grinding to places where runoff can be captured.
Do not start seal coat, tack coat, slurry seal, or fog seal activities if precipitation is predicted during the application or curing period. Do not excavate material from existing roadways during precipitation. Use a vacuum to remove slurry immediately after slurry is produced. Do not allow slurry to run onto lanes open to traffic or off the pavement.
Collect residue from portland cement concrete grinding and grooving activities with a vacuum attachment on the grinding machine. Do not leave any residue on the pavement or allow the residue to flow across the pavement.
If approved, material excavated from existing roadways may be stockpiled under "Stockpile Management" of these Special Provisions.
Do not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.
When paving equipment is not in use, park over drip pans or plastic sheeting with absorbent material to catch drips.

Thermoplastic Striping and Pavement Markers
Thermoplastic striping and preheating equipment shutoff valves must work properly at all times. Do not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets or watercourses. Do not fill a preheating container above a level that is 6 inches below the top. Truck beds must be cleaned daily of scraps or melted thermoplastic.
Do not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets or watercourses. Release all pressure from a melting tank before removing the lid to fill or service. Do not fill a melting tank above a level that is 6 inches below the top.
Collect bituminous material from the roadway after marker removal.
Pile Driving
Keep spill kits and cleanup material at pile driving locations. Pile driving equipment must be parked over drip pans, absorbent pads, or plastic sheeting with absorbent material. If precipitation is predicted, protect pile driving equipment by parking on plywood and covering with plastic. Store pile driving equipment when not in use. Stored pile driving equipment must be:
1. Kept on level ground
2. Protected from storm water run-on
3. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved
4. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, and storm drain inlets unless approved

If practicable, use vegetable oil instead of hydraulic fluid.
The WPC Manager must inspect the pile driving area for leaks and spills:
1. Daily when pile driving occurs daily
2. Weekly when pile driving does not occur daily

Concrete Curing
Do not overspray chemical curing compound. Minimize the drift by spraying as close to the concrete as possible. Cover drainage inlets before applying the curing compound. Minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture while curing concrete.

Concrete Finishing
Collect and dispose of water and solid waste from high-pressure water blasting. Cover drainage inlets within 50 feet before sandblasting. Minimize drift of dust and blast material by keeping the nozzle close to the surface of the concrete. The blast residue may contain hazardous material. Inspect concrete finishing containment structures for damage before each day of use and before predicted precipitation. Remove liquid and solid waste from containment structures after each work shift.

Sweeping
Sweeping must be done using hand or mechanical methods such as vacuuming. Monitor paved areas and roadways within the job site for sediment and debris generating activities such as:
1. Clearing and grubbing
2. Earthwork
3. Trenching
4. Roadway structural section work
5. Vehicles entering and leaving the job site
6. Soil disturbing work
7. Work that causes offsite tracking of material

If sediment or debris is observed, perform sweeping:
1. Within:
   1.1. 8 hours of predicted rain
   1.2. 24 hours unless the Engineer approves a longer period
2. On paved roads at job site entrances and exit locations
3. On paved areas within the job site that flow to storm drains or receiving waters

You may stockpile collected material at the job site. Remove collected material including sediment from paved shoulders, drain inlets, curbs and dikes, and other drainage areas. If stockpiled, dispose of collected material at least once per week.

You may dispose of sediment within the job site that you collected during sweeping activities. Protect disposal areas against erosion.

Remove and dispose of trash collected during sweeping under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications.

Dewatering

Dewatering consists of discharging accumulated storm water, ground water, or surface water from excavations or temporary containment facilities.

If dewatering and discharging activities are specified under a work item such as "Temporary Active Treatment System" or "Dewatering and Discharge," perform dewatering work as specified in the section involved.

If dewatering and discharging activities are not specified under a work item and you will be performing dewatering activities, you must:

1. Submit a Dewatering and Discharge Plan under Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and "Water Pollution Control" of these Special Provisions at least 10 days before starting dewatering activities. The Dewatering and Discharge Plan must include:
   1.1. Title sheet and table of contents
   1.2. Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge points
   1.3. Estimated schedule for dewatering and discharge (start and end dates, intermittent or continuous)
   1.4. Discharge alternatives such as dust control or percolation
   1.5. Visual monitoring procedures with inspection log
2. Conduct dewatering activities under the Departments' s "Field Guide for Construction Dewatering."
3. Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.
4. Discharge the water within the project limits. Dispose of the water in the same way as specified for material in Section 7-1.13 "Disposal of Material Outside the Highway Right of Way" of the Standard Specification if it cannot be discharged within project limits due to site constraints.
5. Do not discharge storm water or non-stormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface. Notify the Engineer immediately upon discovering any such condition.

The WPC manager must inspect dewatering activities:
   1. Daily when dewatering work occurs daily
   2. Weekly when dewatering work does not occur daily

10-1.08B PAYMENT:

The contract lump sum price paid for construction site management includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in spill prevention and control, material management, waste management, non-stormwater management, and dewatering and identifying, sampling, testing, handling, and disposing of hazardous waste resulting from your activities, as specified in the Standard Specifications and these Special Provisions, and as
ordered by the Engineer.

10-1.09 EROSION AND SEDIMENTATION CONTROL PLAN:
An Erosion and Sedimentation Control Plan is required as a condition of the consultation with NOAA Fisheries and is a requirement of the Construction Contract. The purpose of the plan is to prevent erosion and sedimentation resulting from construction activities from entering the river and affecting downstream aquatic habitats. The plan which is visually presented in the “Construction Access Plan” sheet includes the following elements.

1. Installation of cofferdams (constructed of clean river-run gravel) upstream and downstream of the construction zone, with bypass flows through a channel. A temporary construction bridge shall be used to bridge the river-run gravel cofferdams. Sheet pile cofferdams will be installed around the areas where new bridge piers will be installed prior to installation of the piers.

2. During demolition and construction, all water will be diverted around the construction area by a barrier, temporary channel, and/or a new channel capable of permitting upstream and downstream fish movement.

3. The movement of equipment across the flowing stream will be conducted without substantially increasing turbidity in the stream. If repeated crossings are required, a bridge shall be installed to prevent equipment from operating in the flowing stream. The Temporary Construction Bridge is required to allow the necessary construction access for the contractor without allowing equipment in the Carmel River.

4. Prior to the start of construction, silt catchment basins (desiltation basins) will be installed immediately upstream and downstream of the construction and demolition area. Water containing sediment and wash water shall not be allowed to enter the flowing stream and shall be diverted into these basins. The minimum capacity of each basin will be 50 cubic yards per horizontal acre of slope disturbed. After each storm, the basins will be checked against their design capacity. If necessary, silt and sediment will be removed to restore capacity. The locations of the silt catchment basins may be relocated from the locations that are shown on the plans to facilitate construction activities.

5. A silt fence will be installed along the entire work site in order to separate the work site from the flowing stream.

6. As six foot tall plastic mesh construction fence (ESA fencing) will be installed along the edge of the construction area and adjacent riparian vegetation.

7. Bare areas along the streambanks created by the removal of vegetation will be revegetated with erosion control seed mix prior to October 15 of each year during construction.

8. No foreign materials, including debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement, concrete (including washings), oil petroleum products, or other organic or earthen material from any construction or construction associated activity, will be allowed to enter into any area where it may be washed by rainfall or runoff into the Carmel River. No rubbish will be placed within 150 feet of the high water mark of the Carmel River. Construction debris will not be allowed to drift from the work area and shall be cleaned up daily.
9. Construction in the stream channel will be limited to the period between June 1 and October 15, unless prior authorization is obtained from the California Department of Fish and Game, the Corps of Engineers and the USFWS. The period of time that construction is allowed within the streambed by the requirements of the regulatory agencies and indicated in these special provisions is referred to as the construction season.

10. Winter erosion control shall be in place prior to October 15 of each construction year and maintained in working condition until the next construction season begins.

11. Upon completion of the project and after all flowing water is clear of turbidity, the gravel and trapped sediment shall be removed from the stream. The stream channel, stream bank margin and streambed gradient shall be returned as nearly as possible to its pre-construction condition.

Compensation for the requirements of the “Erosion and Sedimentation Plan” including catchment basins desilting basins and sheet piling shall be provided for by other items of work related to erosion control and no additional compensation shall be allowed therefor.

10-1.10 TEMPORARY BRIDGE (CONSTRUCTION ACCESS):

A temporary bridge shall be provided by the Contractor to allow construction equipment to cross the Carmel River without sedimentation impacts as indicated in “Erosion Control and Sedimentation Plan” of these special provisions and as shown on the “Construction Access Plan” Sheet. The cofferdam supports of the temporary bridge shall be “clean river run gravel” to prevent siltation into the Carmel River. The Contractor shall be responsible for exact design of the temporary bridge. The minimum length of the bridge shall be 40 feet. The entire streamflow of the Carmel River shall be confined within the channel under the temporary bridge during the construction seasons.

Compensation for the design, materials and installation of the temporary bridge shall be included in the item of work “Temporary Bridge (Construction Access)” and shall include clean river run gravel to channel the river and support the bridge.

10-1.11 TEMPORARY EROSION CONTROL:

Temporary erosion control work shall consist of applying erosion control materials to embankment slopes, excavation slopes and other areas designated on the plans. Temporary erosion control work shall be completed in the designated areas during the period starting October 15 and ending April 1, or within 10 working days after an area becomes inactive during this period as defined in "Water Pollution Control" of these special provisions.

Not less than sixty (60) days prior to applying seeds, the Contractor shall furnish the Engineer a statement from the vendor that the order for the seed required for this contract has been received and accepted by the vendor. The statement from the vendor shall include the names and quantity of seed ordered and the anticipated date of delivery.

10-1.11A MATERIALS:

Materials shall conform to the provisions in Section 20-2, "Materials," of the Standard Specifications and these special provisions.
Stabilizing Emulsion

Stabilizing emulsion shall conform to the provisions in Section 20-2.11, "Stabilizing Emulsion," of the Standard Specifications and these special provisions. The requirement of an effective life of at least one year for stabilizing emulsion shall not apply. Stabilizing emulsion shall be in a dry powder form, may be reemulsifiable, and shall be a processed organic adhesive.

10-1.11B APPLICATION:

Temporary erosion control materials shall be applied in 2 separate applications in the following sequence:

A. The following mixture in the proportions indicated shall be applied with hydroseeding equipment within 60 minutes after the seed has been added to the mixture:

<table>
<thead>
<tr>
<th>Material</th>
<th>Pounds Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>15</td>
</tr>
<tr>
<td>Seed</td>
<td>270</td>
</tr>
<tr>
<td>Compost</td>
<td>500</td>
</tr>
</tbody>
</table>

B. Straw shall be applied at the rate of 2 tons per acre based on slope measurements. Incorporation of straw will not be required.

C. The following mixture in the proportions indicated shall be applied with hydroseeding equipment:

<table>
<thead>
<tr>
<th>Material</th>
<th>Pounds Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>270</td>
</tr>
<tr>
<td>Compost</td>
<td>500</td>
</tr>
<tr>
<td>Commercial Fertilizer</td>
<td>180</td>
</tr>
<tr>
<td>Stabilizing Emulsion (solids)</td>
<td>105</td>
</tr>
</tbody>
</table>

D. The ratio of total water to total stabilizing emulsion in the mixture shall be as recommended by the manufacturer.

E. Once straw work is started in an area, the remaining applications shall be completed in that area on the same working day.

F. The proportions of erosion control materials may be changed by the Engineer to meet field conditions.

10-1.11C MEASUREMENT AND PAYMENT:

Temporary erosion control for item of work “Erosion Control (Type D)” will be measured by the square yard. The quantity of temporary erosion control to be paid for by the square yard will be calculated on the basis of actual or computed slope measurements. Temporary erosion control application will be required in the fall at the end of each of the two construction seasons scheduled for the Schulte Road Bridge Project. The application of temporary erosion control work to all disturbed areas during the end of each construction season shall be included in the contract price paid per square yard for “Erosion Control (Type D)” for each year applied.
The contract price paid per square yard for temporary erosion control for item of work "Erosion Control (Type D)" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in temporary erosion control, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer. Partial payment will be made for the application of temporary erosion control for the area applied for the first year of construction and final partial payment after application of temporary erosion control for the second season.

Temporary erosion control placed at locations other than as shown on the project plans or directed by the Engineer, in conformance with the Contractor's Storm Water Pollution Prevention Plan (SWPPP), will not be measured and will be paid for as specified in "Water Pollution Control" of these special provisions.

10-1.12 TEMPORARY CONCRETE WASHOUT FACILITY:

Temporary concrete washout facilities shall be constructed, maintained, and later removed at the locations shown on the approved Storm Water Pollution Prevention Plan (SWPPP) in conformance with "Water Pollution Control" of these special provisions, and in conformance with details shown on the plans and these special provisions.

Temporary concrete washout facilities shall be one of the water pollution control practices for waste management and materials pollution control. The Storm Water Pollution Prevention Plan (SWPPP) shall include the use of temporary concrete washout facilities.

10-1.12A MATERIALS:

Plastic Liner

Plastic liners shall be single ply, new polyethylene sheeting, a minimum of 10 mils thick and shall be free of holes, punctures, tears or other defects that compromise the impermeability of the material. Plastic liners shall not have seams or overlapping joints.

Gravel-filled Bags

Gravel bag fabric shall be nonwoven polypropylene geotextile (or comparable polymer) and shall conform to the following requirements:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight per unit area, ounces per square yard, min.</td>
<td>8.0</td>
</tr>
<tr>
<td>ASTM Designation: D 5261</td>
<td></td>
</tr>
<tr>
<td>Grab tensile strength (one inch grip), kilonewtons, min.</td>
<td>205</td>
</tr>
<tr>
<td>ASTM Designation: D 4632*</td>
<td></td>
</tr>
<tr>
<td>Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D 4355, xenon arc lamp method</td>
<td>70</td>
</tr>
</tbody>
</table>

* or appropriate test method for specific polymer

Gravel bags shall be between 24 inches and 32 inches in length, and between 16 inches and 20 inches in width.
Yarn used for binding gravel bags shall be as recommended by the manufacturer or bag supplier and shall be of a contrasting color.

Gravel shall be between 3/8 inch and 3/4 inch in diameter, and shall be clean and free from clay balls, organic matter, and other deleterious materials.

The opening of gravel-filled bags shall be secured to prevent gravel from escaping. Gravel-filled bags shall be between 30 pounds and 50 pounds in weight.

Straw Bales

Straw for straw bales shall conform to the provisions in Section 20-2.06, "Straw," of the Standard Specifications.

Straw bales shall be a minimum of 14 inches in width, 18 inches in height, 36 inches in length and shall have a minimum weight of 50 pounds. The straw bale shall be composed entirely of vegetative matter, except for binding material.

Straw bales shall be bound by either wire, nylon or polypropylene string. Jute or cotton binding shall not be used. Baling wire shall be a minimum of 16 gage in diameter. Nylon or polypropylene string shall be approximately 0.08-inch in diameter with 80 pounds of breaking strength.

Stakes

Stakes shall be wood or metal. Wood stakes shall be untreated fir, redwood, cedar, or pine and cut from sound timber. They shall be straight and free of loose or unsound knots or other defects which would render them unfit for the purpose intended. Wood stakes shall be a minimum 2" x 2" in size. Metal stakes may be used as an alternative, and shall be a minimum of 0.5-inch in diameter. Stakes shall be a minimum of 4 feet in length. The tops of the metal stakes shall be bent at a 90-degree angle or capped with an orange or red plastic safety cap that fits snugly to the metal stake. The Contractor shall submit a sample of the metal stake and plastic cap, if used, for the Engineer's approval before installation.

Staples

Staples shall be as shown on the plans. An alternative attachment device such as geotextile pins or plastic pegs may be used instead of staples. The Contractor shall submit a sample of the alternative attachment device for the Engineer's approval before installation.

Signs


Plywood shall be freshly painted for each installation with not less than 2 applications of flat white paint. Sign letters shown on the plans shall be stenciled with commercial quality exterior black paint. Testing of paint will not be required.
10-1.12B INSTALLATION:
Temporary concrete washout facilities shall be as follows:

1. Temporary concrete washout facilities shall be installed before beginning placement of concrete and located a minimum of 50 feet from storm drain inlets, open drainage facilities, and water courses unless determined infeasible by the Engineer. Temporary concrete washout facilities shall be located away from construction traffic or access areas at a location determined by the Contractor and approved by the Engineer.

2. A sign shall be installed adjacent to each washout facility at a location determined by the Contractor and approved by the Engineer. Signs shall be installed in conformance with the provisions in Section 56-2.03, "Construction," and Section 56-2.04, "Sign Panel Installation," of the Standard Specifications with Amendments issued 11/30/10.

3. The length and width of a temporary concrete washout facility may be increased from the minimum dimensions shown on the plans upon approval of the Engineer.

4. Temporary concrete washout facilities shall be constructed in sufficient quantity and size to contain liquid and concrete waste generated by washout operations for concrete wastes. These facilities shall be constructed to contain liquid and concrete waste without seepage, spills, or overflow.

5. Berms for below grade temporary concrete washout facilities shall be constructed from compacted native material. Gravel may be used in conjunction with compacted native material.

6. A plastic liner shall be installed in below grade temporary concrete washout facilities.

Details for an alternative temporary concrete washout facility shall be submitted to the Engineer for approval at least 7 days before installation.

When temporary concrete washout facilities are no longer required for the work, as determined by the Engineer, the hardened concrete and liquid residue shall be removed and disposed of in conformance with the provisions in Section 15-3.02, "Removal Methods," of the Standard Specifications with Amendments issue date 11-30-10. Temporary concrete washout facilities shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary concrete washout facilities shall be backfilled and repaired in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications with Amendments issue date 11-30-10.

10-1.12C MAINTENANCE:
Temporary concrete washout facilities shall be maintained to provide adequate holding capacity with a minimum freeboard of 12 inches. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of in conformance with the provisions in Section 15-3.02, "Removal Methods," of the Standard Specifications with Amendments issue date 11-
30-10. Holes, rips, and voids in the plastic liner shall be patched and repaired by taping or the plastic liner shall be replaced. The plastic liner shall be replaced when patches or repairs compromise the impermeability of the material as determined by the Engineer.

Gravel bags shall be replaced when the bag material is ruptured or when the yarn has failed, allowing the bag contents to spill out.

Temporary concrete washout facilities shall be repaired or replaced on the same day the damage occurs. Damage to temporary concrete washout facilities resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

10-1.12D MEASUREMENT AND PAYMENT:

Quantities of temporary concrete washout facilities will be measured as units determined from actual count in place.

The contract unit price paid for temporary concrete washout facility shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing a temporary concrete washout facility, complete in place, including excavation and backfill, maintenance, and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.13 TEMPORARY SILT FENCE:

Temporary silt fence shall be furnished, installed, maintained, and later removed at the locations shown on the approved Storm Water Pollution Prevention Plan (SWPPP) in conformance with "Water Pollution Control" of these special provisions, and in conformance with details shown on the plans and these special provisions.

Temporary silt fence shall be one of the water pollution control practices for sediment control. The SWPPP shall include the use of temporary silt fence.

10-1.13A MATERIALS:

Temporary silt fence shall be either prefabricated or constructed with silt fence fabric, posts, and fasteners.

Silt Fence Fabric

Silt fence fabric shall be geotextile manufactured from woven polypropylene or polymer material. Silt fence fabric may be virgin, recycled, or a combination of virgin and recycled polymer materials. No virgin or recycled polymer materials shall contain biodegradable filler materials that can degrade the physical or chemical characteristics of the finished fabric. The Engineer may order tests to confirm the absence of biodegradable filler materials in conformance to the requirements in ASTM Designation: E 204 (Fourier Transformed Infrared Spectroscopy-FTIR).

Silt fence fabric shall conform to the following requirements:
<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width, inches, minimum</td>
<td>36</td>
</tr>
<tr>
<td>Grab tensile strength (one inch grip), pounds, minimum</td>
<td>124</td>
</tr>
<tr>
<td>in each direction</td>
<td></td>
</tr>
<tr>
<td>ASTM Designation: D 4632*</td>
<td>15</td>
</tr>
<tr>
<td>Elongation, percent minimum in each direction</td>
<td></td>
</tr>
<tr>
<td>ASTM Designation: D 4632*</td>
<td></td>
</tr>
<tr>
<td>Permittivity, 1/sec., minimum</td>
<td>0.05</td>
</tr>
<tr>
<td>ASTM Designation: D 4491</td>
<td></td>
</tr>
<tr>
<td>Flow rate, gallons per minute per square foot, minimum</td>
<td>10</td>
</tr>
<tr>
<td>ASTM Designation: D 4491</td>
<td></td>
</tr>
<tr>
<td>Ultraviolet stability, percent tensile strength retained after 500 hours, minimum</td>
<td>70</td>
</tr>
<tr>
<td>ASTM Designation: D 4355 (xenon-arc lamp and water spray weathering method)</td>
<td></td>
</tr>
</tbody>
</table>

* or appropriate test method for specific polymer

**Posts**

Posts for temporary silt fence shall be one of the following:

1. Untreated fir or pine, a minimum of 2" x 2" in size, and 4 feet in length. One end of the post shall be pointed.

2. Steel and have a "U," "T," "L," or other cross sectional shape that can resist failure from lateral loads. The steel posts shall have a minimum weight of 0.8-pound per foot and a minimum length of 4 feet. One end of the steel posts shall be pointed and the other end shall be capped with an orange or red plastic safety cap which fits snugly to the steel post. The Contractor shall submit to the Engineer for approval a sample of the capped steel post before installation.

**Fasteners**

Fasteners for attaching silt fence fabric to posts shall be as follows:

1. When prefabricated silt fence is used, posts shall be inserted into sewn pockets.

2. Silt fence fabric shall be attached to wooden posts with nails or staples as shown on the plans or as recommended by the manufacturer or supplier. Tie wire or locking plastic fasteners shall be used to fasten the silt fence fabric to steel posts. Maximum spacing of fasteners shall be 8 inches along the length of the steel post.

**10-1.13B INSTALLATION:**

Temporary silt fence shall be installed parallel with the slope contour in reaches not to exceed 500 feet. A reach is considered a continuous run of temporary silt fence from end to end or from an end to an opening, including joined panels. Each reach shall be constructed so that the elevation at the base of the fence does not deviate from the contour more than 1/3 of the fence height.

The silt fence fabric shall be installed on the side of the posts facing the slope. The silt fence fabric shall be anchored in a trench as shown on the plans. The trench shall be backfilled and mechanically or hand tamped to secure the silt fence fabric in the bottom of the trench.

Mechanically pushing 12 inches of the silt fence fabric vertically through the soil may be allowed.
if the Contractor can demonstrate to the Engineer that the silt fence fabric will not be damaged and will not slip out of the soil resulting in sediment passing under the silt fence fabric.

The maximum post spacing may be increased to 10 feet if the fence is reinforced by a wire or plastic material by prefabication or by field installation. The field-assembled reinforced temporary silt fence shall be able to retain saturated sediment without collapsing.

Temporary silt fence shall be joined as shown on the plans. The tops of the posts shall be tied together by minimum of 2 wraps of tie wire of a minimum 16-gage diameter. The silt fence fabric shall be attached to the posts at the joint as specified in these special provisions.

When no longer required as determined by the Engineer, temporary silt fence shall be removed and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications. Trimming the silt fence fabric and leaving it in place will not be allowed.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary silt fence shall be backfilled and repaired in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications.

10-1.13C MAINTENANCE:

Temporary silt fence shall be maintained to provide a sediment holding capacity of approximately 1/3 the height of the silt fence fabric above ground. When sediment exceeds this height or when directed by the Engineer, sediment shall be removed. The removed sediment shall be deposited within the project limits so that the sediment is not subject to erosion by wind or by water.

Temporary silt fence shall be repaired or replaced the same day the damage occurs. Damage to the temporary silt fence resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

10-1.13D MEASUREMENT AND PAYMENT:

Quantities of temporary silt fence to be paid for will be determined by the linear foot, measured parallel with the ground slope along the line of the installed temporary silt fence, deducting the widths of openings.

The contract price paid per linear foot for temporary silt fence shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing temporary silt fence, complete in place, including trench excavation and backfill, maintenance, and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.14 TEMPORARY FENCE (TYPE BW):

Temporary fence (Type BW) shall be furnished, constructed, maintained, and later removed as shown on the plans, as specified in these special provisions and as directed by the Engineer.

Except as otherwise specified in this section, temporary fence shall conform to the plan details and the specifications for permanent fence of similar character as provided in Section 80, "Fences," of
the Standard Specifications with Amendments issue date 11-30-10.

Used materials may be installed provided the used materials are good, sound and are suitable for the purpose intended, as determined by the Engineer.

Materials may be commercial quality provided the dimensions and sizes of the materials are equal to, or greater than, the dimensions and sizes shown on the plans or specified herein.

Posts shall be either metal or wood at the Contractor's option.

Galvanizing and painting of steel items will not be required.

Treating wood with a wood preservative will not be required.

Concrete footings for metal posts will not be required.

Temporary fence that is damaged during the progress of the work shall be repaired or replaced by the Contractor at the Contractor's expense.

When no longer required for the work, as determined by the Engineer, temporary fence shall be removed. Removed facilities shall become the property of the Contractor and shall be removed from the site of the work, except as otherwise provided in this section.

Removed temporary fence materials that are not damaged may be constructed in the permanent work provided the materials conform to the requirements specified for the permanent work and such materials are new when used for the temporary fence.

Holes caused by the removal of temporary fence shall be backfilled in conformance with the provisions in the second paragraph of Section 15-1.02, "Preservation of Property," of the Standard Specifications with Amendments issue date 11-30-10.

The various types and kinds of temporary fence will be measured and paid for in the same manner specified for permanent fence of similar character as provided in Section 80, "Fences," of the Standard Specifications with Amendments issue date 11-30-10.

Full compensation for maintaining, removing, and disposing of temporary fence shall be considered as included in the contract prices paid per linear foot for the Item of Work “Temporary Fence (Type BW) and no additional compensation will be allowed therefor.

10-1.15 TEMPORARY FENCE (TYPE ESA):

Temporary fence (Type ESA) shall be furnished, constructed, maintained, and later removed as shown on the plans, as specified in these special provisions and as directed by the Engineer.

10-1.15A MATERIALS:

Used materials may be installed provided the used materials conform to these special provisions.

High Visibility Fabric

The Schulte Road Bridge Mitigation Measures require that the ESA fence consist of a color that
blends in with the natural surroundings. Reference within this section to High visibility fabric shall correspond to a color that blends in with the natural surroundings and is not brightly colored.

High visibility fabric shall be machine produced, colored mesh manufactured from polypropylene or polyethylene. High visibility fabric may be made of recycled materials. Materials shall not contain biodegradable filler materials that can degrade the physical or chemical characteristics of the finished fabric. High visibility fabric shall be fully stabilized ultraviolet resistant, shall be a minimum of 4 feet in width with a maximum mesh opening of 2" x 2". High visibility fabric shall be furnished in one continuous width and shall not be spliced to conform to the specified width dimension.

Posts

Posts for temporary fence (Type ESA) shall be of one of the following:

A. Wood posts shall be fir or pine, shall have a minimum cross section of 2" x 2", and a minimum length of 5.25 feet. The end of the post to be embedded in the soil shall be pointed. Wood posts shall not be treated with wood preservative.

B. Steel posts shall have a "U," "T," "L," or other cross sectional shape that resists failure from lateral loads. Steel posts shall have a minimum weight of 0.75 pounds per linear foot and a minimum length of 5.25 feet. One end of the steel post shall be pointed and the other end shall have a high visibility colored top.

Fasteners

Fasteners for attaching high visibility fabric to the posts shall be as follows:

A. The high visibility fabric shall be attached to wooden posts with commercial quality nails or staples, or as recommended by the manufacturer or supplier.

B. Tie wire or locking plastic fasteners shall be used for attaching the high visibility fabric to steel posts. Maximum spacing of tie wire or fasteners shall be 24 inches along the length of the steel post.

10-1.15B INSTALLATION:

Temporary fence (Type ESA) shall be installed as follows:

A. All fence construction activities shall be conducted from outside the ESA as shown on the plans or as staked.

B. Posts shall be embedded in the soil a minimum of 16 inches. Post spacing shall be 8 feet maximum from center to center and shall at all times support the fence in a vertical position.

C. Temporary fence (Type ESA) shall be constructed prior to clearing and grubbing work, shall enclose the foliage canopy (drip line) of protected plants, and shall not encroach upon visible roots of the plants.

When Type ESA temporary fence is no longer required, as determined by the Engineer, the temporary fence shall be removed and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10, except when reused as provided in this section.

Holes caused by the removal of temporary fence (Type ESA) shall be backfilled in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications with
Amendments issue date 11-30-10.

10-1.15C MAINTENANCE:
Temporary fence (Type ESA) that is damaged during the progress of the work shall be repaired or replaced by the Contractor the same day the damage occurs.

10-1.15D MEASUREMENT AND PAYMENT:
Temporary fence (Type ESA) will be measured and paid for in the same manner specified for fence (Type BW or WM, wood or metal posts) as provided in Section 80, "Fences," of the Standard Specifications with Amendments issue date 11-30-10.

Full compensation for maintaining, removing, and disposing of temporary fence (Type ESA) shall be considered as included in the contract price paid per linear foot for temporary fence (Type ESA) and no additional compensation will be allowed therefor.

10-1.16 COOPERATION:
Attention is directed to Sections 7-1.14, "Cooperation," and 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications and these special provisions.

It is required that work for items of work No. 23 "Relocate Water Utility Lines", No. 24 "Relocate Water Meter", No. 25 "Adjust Water Meter", and No. 26 "Relocate Water Valve" for Cal Am Water will be incorporated with the project to provide utility water line relocations during the four phases of work indicated in these special provisions and shown on the plans for utility staging. The Contractor shall cooperate with the Engineer and Cal Am Water to provide the construction coordination, construction area and time frame necessary for the relocation of utilities during construction.

10-1.17 PROGRESS SCHEDULE (CRITICAL PATH METHOD):
The Contractor shall submit to the Engineer practicable critical path method (CPM) progress schedules in conformance with these special provisions. Whenever the term "schedule" is used in this section it shall mean CPM progress schedule.

Attention is directed to "Payments" of Section 5 of these special provisions.

The provisions in Section 8-1.04, "Progress Schedule," of the Standard Specifications shall not apply.

10-1.17A DEFINITIONS:
The following definitions shall apply to this section:

A. ACTIVITY.—A task, event or other project element on a schedule that contributes to completing the project. Activities have a description, start date, finish date, duration and one or more logic ties.
B. BASELINE SCHEDULE.—The initial schedule representing the Contractor's work plan on the first working day of the project.
C. CONTRACT COMPLETION DATE.—The current extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in conformance with the provisions in Section 8-1.06, "Time of Completion," of the Standard Specifications.

D. CRITICAL PATH.—The longest continuous chain of activities for the project that has the least amount of total float of all chains. In general, a delay on the critical path will extend the scheduled completion date.

E. CRITICAL PATH METHOD (CPM).—A network-based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project.

F. DATA DATE.—The day after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "planned."

G. EARLY COMPLETION TIME.—The difference in time between an early scheduled completion date and the contract completion date.

H. FLOAT.—The difference between the earliest and latest allowable start or finish times for an activity.

I. MILESTONE.—An event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.

J. NARRATIVE REPORT.—A document submitted with each schedule that discusses topics related to project progress and scheduling.

K. NEAR CRITICAL PATH.—A chain of activities with total float exceeding that of the critical path but having no more than 10 working days of total float.

L. SCHEDULED COMPLETION DATE.—The planned project finish date shown on the current accepted schedule.

M. STATE OWNED FLOAT ACTIVITY.—The activity documenting time saved on the critical path by actions of the State. It is the last activity prior to the scheduled completion date.

N. TIME IMPACT ANALYSIS.—A schedule and narrative report developed specifically to demonstrate what effect a proposed change or delay has on the current scheduled completion date.

O. TOTAL FLOAT.—The amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.

P. UPDATE SCHEDULE.—A current schedule developed from the baseline or subsequent schedule through regular monthly review to incorporate as-built progress and any planned changes.

10-1.17B GENERAL REQUIREMENTS:

The Contractor shall submit to the Engineer baseline, monthly update and final update schedules, each consistent in all respects with the time and order of work requirements of the contract. The project work shall be executed in the sequence indicated on the current accepted schedule.

Schedules shall show the order in which the Contractor proposes to carry out the work with logical links between time-scaled work activities, and calculations made using the critical path method to determine the controlling operation or operations. The Contractor is responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

The Contractor shall produce schedules using computer software and shall furnish compatible
software for the Engineer's exclusive possession and use. The Contractor shall furnish network diagrams, narrative reports, tabular reports and schedule data as parts of each schedule submittal.

Schedules shall include, but not be limited to, activities that show the following that are applicable to the project:

A. Project characteristics, salient features, or interfaces, including those with outside entities, that could affect time of completion.
B. Project start date, scheduled completion date and other milestones.
C. Work performed by the Contractor, subcontractors and suppliers.
D. Submittal development, delivery, review and approval, including those from the Contractor, subcontractors and suppliers.
E. Procurement, delivery, installation and testing of materials, plants and equipment.
F. Testing and settlement periods.
G. Utility notification and relocation.
H. Erection and removal of falsework and shoring.
I. Major traffic stage switches.
J. Finishing roadway and final cleanup.
K. State-owned float as the predecessor activity to the scheduled completion date.

Schedules shall have not less than 50 and not more than 500 activities, unless otherwise authorized by the Engineer. The number of activities shall be sufficient to assure adequate planning of the project, to permit monitoring and evaluation of progress, and to do an analysis of time impacts.

Schedule activities shall include the following:

A. A clear and legible description.
B. Start and finish dates.
C. A duration of not less than one working day, except for event activities, and not more than 20 working days, unless otherwise authorized by the Engineer.
D. At least one predecessor and one successor activity, except for project start and finish milestones.
E. Required constraints.
F. Codes for responsibility, stage, work shifts, location and contract pay item numbers.

The Contractor may show early completion time on any schedule provided that the requirements of the contract are met. Early completion time shall be considered a resource for the exclusive use of the Contractor. The Contractor may increase early completion time by improving production, reallocating resources to be more efficient, performing sequential activities concurrently or by completing activities earlier than planned. The Contractor may also submit for approval a cost reduction incentive proposal in conformance with the provisions in Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications that will reduce time of construction.

The Contractor may show a scheduled completion date that is later than the contract completion date on an update schedule, after the baseline schedule is accepted. The Contractor shall provide an explanation for a late scheduled completion date in the narrative report that is included with the schedule.
State-owned float shall be considered a resource for the exclusive use of the State. The Engineer may accrue State-owned float by the early completion of review of any type of required submittal when it saves time on the critical path. The Contractor shall prepare a time impact analysis, when requested by the Engineer, to determine the effect of the action in conformance with the provisions in "Time Impact Analysis" specified herein. The Engineer will document State-owned float by directing the Contractor to update the State-owned float activity on the next update schedule. The Contractor shall include a log of the action on the State-owned float activity and include a discussion of the action in the narrative report. The Engineer may use State-owned float to mitigate past, present or future State delays by offsetting potential time extensions for contract change orders.

The Engineer may adjust contract working days for ordered changes that affect the scheduled completion date, in conformance with the provisions in Section 4-1.03, "Changes," of the Standard Specifications. The Contractor shall prepare a time impact analysis to determine the effect of the change in conformance with the provisions in "Time Impact Analysis" specified herein, and shall include the impacts acceptable to the Engineer in the next update schedule. Changes that do not affect the controlling operation on the critical path will not be considered as the basis for a time adjustment. Changes that do affect the controlling operation on the critical path will be considered by the Engineer in decreasing time or granting an extension of time for completion of the contract. Time extensions will only be granted if the total float is absorbed and the scheduled completion date is delayed one or more working days because of the ordered change.

The Engineer's review and acceptance of schedules shall not waive any contract requirements and shall not relieve the Contractor of any obligation thereunder or responsibility for submitting complete and accurate information. Schedules that are rejected shall be corrected by the Contractor and resubmitted to the Engineer within 5 working days of notification by the Engineer, at which time a new review period of one week will begin.

Errors or omissions on schedules shall not relieve the Contractor from finishing all work within the time limit specified for completion of the contract. If, after a schedule has been accepted by the Engineer, either the Contractor or the Engineer discover that any aspect of the schedule has an error or omission, it shall be corrected by the Contractor on the next update schedule.

10-1.17C COMPUTER SOFTWARE:

The Contractor shall submit to the Engineer for approval a description of proposed software before delivery. The software shall be the current version of Primavera SureTrak Project Manager for Windows, or equal, and shall be compatible with Windows XP operating system. If software other than SureTrak is proposed, it shall be capable of generating files that can be imported into SureTrak.

The Contractor shall furnish schedule software and all original software instruction manuals to the Engineer with submittal of the baseline schedule. The furnished schedule software shall become the property of the State and will not be returned to the Contractor. The State will compensate the Contractor in conformance with the provisions in Section 4-1.03, "Extra Work," of the Standard Specifications for replacement of software which is damaged, lost or stolen after delivery to the Engineer.

The Contractor shall instruct the Engineer in the use of the software and provide software support until the contract is accepted. Within 20 working days of contract approval, the Contractor shall provide
a commercial 8-hour training session for 2 Department employees in the use of the software at a location acceptable to the Engineer. It is recommended that the Contractor also send at least 2 employees to the same training session to facilitate development of similar knowledge and skills in the use of the software. If software other than SureTrak is furnished, then the training session shall be a total of 16-hours for each Department employee.

10-1.17D NETWORK DIAGRAMS, REPORTS AND DATA:
The Contractor shall include the following for each schedule submittal:

A. Two sets of originally plotted, time-scaled network diagrams.
B. Two copies of a narrative report.
C. Two copies of each of 3 sorts of the CPM software-generated tabular reports.
D. One 1.44-megabyte 3.5 inch floppy diskette containing the schedule data.

The time-scaled network diagrams shall conform to the following:

A. Show a continuous flow of information from left to right.
B. Be based on early start and early finish dates of activities.
C. Clearly show the primary paths of criticality using graphical presentation.
D. Be prepared on E-size sheets, 34" x 44".
E. Include a title block and a timeline on each page.

The narrative report shall be organized in the following sequence with all applicable documents included:

A. Contractor's transmittal letter.
B. Work completed during the period.
C. Identification of unusual conditions or restrictions regarding labor, equipment or material; including multiple shifts, 6-day work weeks, specified overtime or work at times other than regular days or hours.
D. Description of the current critical path.
E. Changes to the critical path and scheduled completion date since the last schedule submittal.
F. Description of problem areas.
G. Current and anticipated delays:
   1. Cause of delay.
   2. Impact of delay on other activities, milestones and completion dates.
   3. Corrective action and schedule adjustments to correct the delay.
H. Pending items and status thereof:
   1. Permits.
   2. Change orders.
   3. Time adjustments.
I. Reasons for an early or late scheduled completion date in comparison to the contract completion date.

Tabular reports shall be software-generated and provide information for each activity included in the project schedule. Three different reports shall be sorted by (1) activity number, (2) early start and (3) total float. Tabular reports shall be 8-1/2" x 11" in size and shall include, as a minimum, the following applicable information:

A. Data date.
B. Activity number and description.
C. Predecessor and successor activity numbers and descriptions.
D. Activity codes.
E. Scheduled, or actual and remaining durations (work days) for each activity.
F. Earliest start (calendar) date.
G. Earliest finish (calendar) date.
H. Actual start (calendar) date.
I. Actual finish (calendar) date.
J. Latest start (calendar) date.
K. Latest finish (calendar) date.
L. Free float (work days).
M. Total float (work days).
N. Percentage of activity complete and remaining duration for incomplete activities.
O. Lags.
P. Required constraints.

Schedule submittals will only be considered complete when all documents and data have been provided as described above.

10-1.17E PRE-CONSTRUCTION SCHEDULING CONFERENCE:

The Contractor shall schedule and the Engineer will conduct a pre-construction scheduling conference with the Contractor's project manager and construction scheduler within 10 working days of the approval of the contract. At this meeting the Engineer will review the requirements of this section of the special provisions with the Contractor.

The Contractor shall submit a general time-scaled logic diagram displaying the major activities and sequence of planned operations and shall be prepared to discuss the proposed work plan and schedule methodology that comply with the requirements of these special provisions. If the Contractor proposes deviations to the construction staging of the project, then the general time-scaled logic diagram shall also display the deviations and resulting time impacts. The Contractor shall be prepared to discuss the proposal.

At this meeting, the Contractor shall additionally submit the alphanumeric coding structure and the activity identification system for labeling the work activities. To easily identify relationships, each
activity description shall indicate its associated scope or location of work by including such terms as quantity of material, type of work, bridge number, station to station location, side of highway (such as left, right, northbound, southbound), lane number, shoulder, ramp name, ramp line descriptor or mainline.

The Engineer will review the logic diagram, coding structure, and activity identification system, and provide any required baseline schedule changes to the Contractor for implementation.

10-1.17F BASELINE SCHEDULE:

Beginning the week following the pre-construction scheduling conference, the Contractor shall meet with the Engineer weekly until the baseline schedule is accepted by the Engineer to discuss schedule development and resolve schedule issues.

The Contractor shall submit to the Engineer a baseline schedule within 20 working days of approval of the contract. The Contractor shall allow 3 weeks for the Engineer's review after the baseline schedule and all support data are submitted. In addition, the baseline schedule submittal will not be considered complete until the computer software is delivered and installed for use in review of the schedule.

The baseline schedule shall include the entire scope of work and how the Contractor plans to complete all work contemplated. The baseline schedule shall show the activities that define the critical path. Multiple critical paths and near-critical paths shall be kept to a minimum. A total of not more than 50 percent of the baseline schedule activities shall be critical or near critical, unless otherwise authorized by the Engineer.

The baseline schedule shall not extend beyond the number of working days specified in these special provisions. The baseline schedule shall have a data date of the first working day of the contract and not include any completed work to date. The baseline schedule shall not attribute negative float or negative lag to any activity.

If the Contractor submits an early completion baseline schedule that shows contract completion in less than 85 percent of the working days specified in these special provisions, the baseline schedule shall be supplemented with resource allocations for every task activity and include time-scaled resource histograms. The resource allocations shall be shown to a level of detail that facilitates report generation based on labor crafts and equipment classes for the Contractor and subcontractors. The Contractor shall use average composite crews to display the labor loading of on-site construction activities. The Contractor shall optimize and level labor to reflect a reasonable plan for accomplishing the work of the contract and to assure that resources are not duplicated in concurrent activities. The time-scaled resource histograms shall show labor crafts and equipment classes to be utilized on the contract. The Engineer may review the baseline schedule activity resource allocations using Means Productivity Standards or equivalent to determine if the schedule is practicable.

10-1.17G UPDATE SCHEDULE:
The Contractor shall submit an update schedule and meet with the Engineer to review contract progress, on or before the first day of each month, beginning one month after the baseline schedule is accepted. The Contractor shall allow 2 weeks for the Engineer's review after the update schedule and all
support data are submitted, except that the review period shall not start until the previous month's required schedule is accepted. Update schedules that are not accepted or rejected within the review period will be considered accepted by the Engineer.

The update schedule shall have a data date of the twenty-first day of the month or other date established by the Engineer. The update schedule shall show the status of work actually completed to date and the work yet to be performed as planned. Actual activity start dates, percent complete and finish dates shall be shown as applicable. Durations for work that has been completed shall be shown on the update schedule as the work actually occurred, including Engineer submittal review and Contractor resubmittal times.

The Contractor may include modifications such as adding or deleting activities or changing activity constraints, durations or logic that do not (1) alter the critical path(s) or near critical path(s) or (2) extend the scheduled completion date compared to that shown on the current accepted schedule. The Contractor shall state in writing the reasons for any changes to planned work. If any proposed changes in planned work will result in (1) or (2) above, then the Contractor shall submit a time impact analysis as described herein.

10-1.17H TIME IMPACT ANALYSIS:

The Contractor shall submit a written time impact analysis (TIA) to the Engineer with each request for adjustment of contract time, or when the Contractor or Engineer consider that an approved or anticipated change may impact the critical path or contract progress.

The TIA shall illustrate the impacts of each change or delay on the current scheduled completion date or internal milestone, as appropriate. The analysis shall use the accepted schedule that has a date closest to and prior to the event. If the Engineer determines that the accepted schedule used does not appropriately represent the conditions prior to the event, the accepted schedule shall be updated to the day before the event being analyzed. The TIA shall include an impact schedule developed from incorporating the event into the accepted schedule by adding or deleting activities, or by changing durations or logic of existing activities. If the impact schedule shows that incorporating the event modifies the critical path and scheduled completion date of the accepted schedule, the difference between scheduled completion dates of the two schedules shall be equal to the adjustment of contract time. The Engineer may construct and utilize an appropriate project schedule or other recognized method to determine adjustments in contract time until the Contractor provides the TIA.

The Contractor shall submit a TIA in duplicate within 15 working days of receiving a written request for a TIA from the Engineer. The Contractor shall allow the Engineer 2 weeks after receipt to approve or reject the submitted TIA. All approved TIA schedule changes shall be shown on the next update schedule.

If a TIA submitted by the Contractor is rejected by the Engineer, the Contractor shall meet with the Engineer to discuss and resolve issues related to the TIA. If agreement is not reached, the Contractor will be allowed 15 days from the meeting with the Engineer to give notice in conformance with the provisions in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications. The Contractor shall only show actual as-built work, not unapproved changes related to the TIA, in subsequent update schedules. If agreement is reached at a later date, approved TIA schedule changes shall be shown on the next update schedule. The Engineer will withhold remaining payment on the
schedule contract item if a TIA is requested by the Engineer and not submitted by the Contractor within 15 working days. The schedule item payment will resume on the next estimate after the requested TIA is submitted. No other contract payment will be retained regarding TIA submittals.

10-1.17i FINAL UPDATE SCHEDULE:

The Contractor shall submit a final update, as-built schedule with actual start and finish dates for the activities, within 30 days after completion of contract work. The Contractor shall provide a written certificate with this submittal signed by the Contractor's project manager and an officer of the company stating, "To my knowledge and belief, the enclosed final update schedule reflects the actual start and finish dates of the actual activities for the project contained herein." An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager.

10-1.17j RETENTION:

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during each estimate period in which the Contractor fails to submit an acceptable schedule conforming to the requirements of these special provisions as determined by the Engineer. Schedule retentions will be released for payment on the next monthly estimate for partial payment following the date that acceptable schedules are submitted to the Engineer or as otherwise specified herein. Upon completion of all contract work and submittal of the final update schedule and certification, any remaining retained funds associated with this section, "Progress Schedule (Critical Path Method)" will be released for payment. Retentions held in conformance with this section shall be in addition to other retentions provided for in the contract. No interest will be due the Contractor on retention amounts.

10-1.17k PAYMENT:

Progress schedule (critical path method) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path method) shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, including computer software, and for doing all the work involved in preparing, furnishing, and updating schedules, and instructing and assisting the Engineer in the use of computer software, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for the progress schedule (critical path method) contract item will be made progressively as follows:

A. A total of 25 percent of the item amount or a total of 25 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon achieving all of the following:

1. Completion of 5 percent of all contract item work.
2. Acceptance of all schedules and TIAs required to the time when 5 percent of all contract item work is complete.
3. Delivery of schedule software to the Engineer.
4. Completion of required schedule software training.
B. A total of 50 percent of the item amount or a total of 50 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of 25 percent of all contract item work and acceptance of all schedules and TIAs required to the time when 25 percent of all contract item work is complete.

C. A total of 75 percent of the item amount or a total of 75 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of 50 percent of all contract item work and acceptance of all schedules and TIAs required to the time when 50 percent of all contract item work is complete.

D. A total of 100 percent of the item amount or a total of 100 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of all contract item work, acceptance of all schedules and TIAs required to the time when all contract item work is complete, and submittal of the certified final update schedule.

If the Contractor fails to complete any of the work or provide any of the schedules required by this section, the Engineer shall make an adjustment in compensation in conformance with the provisions in Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications for the work not performed. Adjustments in compensation for schedules will not be made for any increased or decreased work ordered by the Engineer in furnishing schedules.

10-1.18 PRESERVATION OF PROPERTY:

Attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

Existing trees, shrubs, and other plants, that are not to be removed as shown on the plans or specified in these Special Provisions, and are injured or damaged by reason of the Contractor's operations, shall be replaced by the Contractor. Replacement planting shall conform to the requirements in Section 20-4.07, "Replacement," of the Standard Specifications. The Contractor shall water replacement plants in conformance with the provisions in Section 20-4.06, "Watering," of the Standard Specifications.

Damaged or injured plants shall be removed and disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13 of the Standard Specifications with Amendments issue date 11-30-10. At the option of the Contractor, removed trees and shrubs may be reduced to chips. The chipped material shall be spread within the highway right of way at locations designated by the Engineer.

Replacement planting of injured or damaged trees, shrubs and other plants shall be completed not less than 20 working days prior to acceptance of the contract. Replacement plants shall be watered as necessary to maintain the plants in a healthy condition.

10-1.19 OBSTRUCTIONS:

Attention is directed to Section 8-1.10, "Utility and Non-Highway Facilities," and Section 15, "Existing Highway Facilities," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

Attention is directed to the existence of certain underground facilities that may require special
precautions be taken by the Contractor to protect the health, safety and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines greater than 6 inches in diameter or pipelines operating at pressures greater than 60 pounds per square inch (gage); underground electric supply system conductors or cables, with potential to ground of more than 300 V, either directly buried or in a duct or conduit which do not have concentric grounded or other effectively grounded metal shields or sheaths.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include, but are not limited to, the following:

<table>
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<tr>
<th>Notification Center</th>
<th>Telephone Number</th>
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<tbody>
<tr>
<td>Underground Service Alert—Northern California (USA)</td>
<td>(800) 642-2444</td>
</tr>
<tr>
<td></td>
<td>(800) 227-2600</td>
</tr>
<tr>
<td>Underground Service Alert—Southern California (USA)</td>
<td>(800) 422-4133</td>
</tr>
<tr>
<td></td>
<td>(800) 227-2600</td>
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If these facilities are not located on the plans in both alignment and elevation, no work shall be performed in the vicinity of the facilities, except as provided herein for conduit to be placed under pavement, until the owner, or the owner's representative, has located the facility by potholing, probing or other means that will locate and identify the facility. Conduit to be installed under pavement in the vicinity of these facilities shall be placed by the trenching method in conformance with the provisions in "Structure Conduit" of these special provisions. If, in the opinion of the Engineer, the Contractor's operations are delayed or interfered with by reason of the utility facilities not being located by the owner or the owner's representative, the State will compensate the Contractor for the delays to the extent provided in Section 8-1.09, "Delays," of the Standard Specifications with Amendments issue date 11-30-10, and not otherwise, except as provided in Section 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications.

The Contractor shall notify in writing the following utility company representatives five days prior to the beginning of construction:

1. **PG&E**  
   Contact: Bill Helser  
   (831) 784-3627  
   401 Work Street  
   Salinas, CA 93901

   **Pacific Bell (SBC)**  
   Contact: Kirk Bush  
   (831) 754-8501  
   340 Pajaro Street  
   Salinas, CA 93901  
   eqatro@msg.pacbell.com
The following utility facilities will be relocated during the progress of the contract.

The schedule of work shall provide not less than the following number of working days, as defined in Section 8-1.06, “Time of Completion,” of the Standard Specifications for the utility company to complete their work:

The Contractor shall notify the Engineer, in writing, prior to doing work in the vicinity of the facility. The utility facility will be relocated within the listed working days, as defined in Section 8-1.06, "Time of Completion," of the Standard Specifications, after the notification is received by the Engineer:

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<thead>
<tr>
<th>Utility</th>
<th>Location</th>
<th>Working Days</th>
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<tr>
<td>Cal Am</td>
<td>Stage One (A) Utility Plan: Existing Raw Water Main on south edge of existing bridge and underground in approaches to be relocated into Temporary Raw Water Main on bridge as shown on Utility Staging Plan - Stage One.</td>
<td>40</td>
</tr>
<tr>
<td>Cal Am</td>
<td>Stage One (B) Utility Plan: Existing Temporary Raw Water Main (12” ID well line) on bridge and Existing Treated Water Main (8” ID service line) on north edge of existing bridge along with underground connections in approaches to be relocated into conduits installed into bays of upstream half of bridge constructed during phase two of construction and shown on stage one (B) of Utility Staging Plan. Conduit to be installed by Contractor during bridge construction. Contractor to install water mains and approach water mains connected to existing water mains after deck pour of upstream bridge and prior to construction of upstream approach.</td>
<td>20</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>Stage One (B) Utility Plan: Optional: Existing overhead telephone line may be relocated to provide clearance for crane operation if required. AT&amp;T may install overhead telephone into conduit installed into bay of upstream half of bridge to provide clearance for crane operation if required.</td>
<td>15</td>
</tr>
<tr>
<td>Company</td>
<td>Utility Plan</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>Stage One (B) Utility Plan: Existing underground 2” gas line to be relocated into conduit installed into bay of upstream half of bridge constructed during phase two of construction and shown on stage one (B) of Utility Staging Plan. Conduit to be installed by Contractor during bridge construction. PG&amp;E to install gas line and approach gas line connections to existing gas line after deck pour of upstream bridge and prior to construction of upstream approach fill.</td>
<td></td>
</tr>
<tr>
<td>Cal Am</td>
<td>Stage Two Utility Plan: Treated Water Main to be moved from bay of upstream half of bridge to bay of downstream half of bridge constructed during phase three of construction and as shown on stage two of Utility Staging Plan. Conduit to be installed by Contractor during bridge construction. The Raw Water Main placed into upstream half of bridge during stage two utility plan to be split at the approaches and the second Raw Water Main to be connected to the Pipe in bay of upstream half of bridge vacated by the relocated Treated Water Main. Contractor to install water mains and approach water mains connected to existing water mains after deck pour of downstream bridge and prior to construction of downstream approach fill.</td>
<td></td>
</tr>
<tr>
<td>Cal Am</td>
<td>Stage Three Utility Plan: The Treated Water Main placed into the downstream half of bridge to be split at the approaches and the second Treated Water Main to be connected to the Pipe in the bay of the closure pour as shown on stage three of Utility Staging Plan. Contractor to install conduit during construction of the closure pour. Cal Am to install Treated Water Main after closure pour and prior to approach fill at closure pour.</td>
<td></td>
</tr>
</tbody>
</table>

Installation of the following utility facilities will require coordination with the Contractor's operations and are scheduled to occur at various phases of the progress of the contract. The Contractor shall make the necessary arrangements with the utility company, through the Engineer, and shall submit a schedule of work, verified by a representative of the utility company, to the Engineer. The schedule of work shall provide not less than the following number of working days, as defined in Section 8-1.06, "Time of Completion," of the Standard Specifications with Amendments issue date 11-30-10 for the utility company to complete their work:
<table>
<thead>
<tr>
<th>Utility (address)</th>
<th>Location</th>
<th>Working Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalAm Water Co. 12&quot; ID Well line</td>
<td>A South Exterior Bay of box girder bridge and approaches</td>
<td>40</td>
</tr>
<tr>
<td>CalAm Water Co. 8&quot; ID Well line</td>
<td>B South Interior Bay of box girder bridge and approaches</td>
<td></td>
</tr>
<tr>
<td>FG&amp;E 2&quot; Gas line</td>
<td>C South Interior Bay of box girder bridge and approaches</td>
<td>15</td>
</tr>
<tr>
<td>AT&amp;T Lines</td>
<td>D South Interior Bay of box girder bridge and approaches</td>
<td>15</td>
</tr>
<tr>
<td>CalAm Water Co. 12&quot; ID Well line</td>
<td>A North Exterior Bay of box girder bridge and approaches</td>
<td>20</td>
</tr>
<tr>
<td>CalAm Water Co. 8&quot; ID Well line</td>
<td>B North Interior Bay of box girder bridge and approaches</td>
<td></td>
</tr>
</tbody>
</table>

The utility facilities listed in the following table may be arranged as shown on the plans during construction operations to permit the pile driving or drilling operations and the substructure construction. It is anticipated that no other utility facilities will be rearranged or temporarily deactivated in advance of or during construction operations to permit pile driving or drilling operations or substructure construction; unless the Contractor makes the necessary arrangements as provided in Section 8-1.10:

<table>
<thead>
<tr>
<th>Utility Facility</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T Lines</td>
<td>Existing overhead telephone line may be temporarily relocated to provide clearance for crane.</td>
</tr>
</tbody>
</table>

In the event that the utility facilities mentioned above are not removed or relocated by the working days specified and, if in the opinion of the Engineer, the Contractor’s operations are delayed or interfered with by reason of the utility facilities not being removed or relocated by the working days specified, the State shall compensate the Contractor for the delays to the extent provided in Section 8-1.09, “Delays,” of the Standard Specifications with Amendments issue date 11-30-10, and not otherwise, except as provided in Section 8-1.10, “Utility and Non-Highway Facilities,” of the Standard Specifications.

Full compensation for conforming to the requirements of this section, not otherwise provided for, shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor. Full compensation for relocation of the Cal Am water mains, Water Valves and Water Meters shall be by Item No. 23 “Relocate Water Utility Lines”, Item No. 26 “Relocate Water Valve, Item No. 24 “Relocate Water Meter and Item No. 25 “ Adjust Water Meter respectively.
SECTION 10-2 - MISCELLANEOUS

10-2.01 DUST CONTROL:

Dust control shall conform to the provisions in Section 10, "Dust Control," of the Standard Specifications and these Special Provisions.

10-2.02 MOBILIZATION:

Mobilization shall conform to the provisions in Section 11, "Mobilization, "of the Standard Specifications.

The Schulte Road Bridge is scheduled to be constructed in two halves constructed during two consecutive construction seasons. The Contractors Mobilization requirements will provide for the required shut down of construction work within the Carmel River banks during the winter rain season. All temporary construction easement areas shown on the plans will be for the full two years of planed construction and the Contractor shall have access to the areas above the Carmel River banks throughout the two year construction period. Construction access facilities including the temporary construction bridge shown within the Carmel River shall be removed during the fall of the first year and returned in the spring of the second year of construction as required by the permitting agencies and specified in the Standard Plans and these special provisions.

Payment for item of work “Mobilization” shall be as indicated in Section 11-1.02 “Payment” of the Standard Specifications.

10-2.03 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES:

Flagging, signs, and temporary traffic control devices furnished, installed, maintained, and removed when no longer required shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

Category 1 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices. These devices shall be certified as crashworthy by crash testing, crash testing of similar devices, or years of demonstrable safe performance. Category 1 temporary traffic control devices include traffic cones, plastic drums, portable delineators, and channelizers.

If requested by the Engineer, the Contractor shall provide written self-certification for crashworthiness of Category 1 temporary traffic control devices at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use. Self-certification shall be provided by the manufacturer or Contractor and shall include the following:

A. Date,
B. Federal Aid number (if applicable),
C. Contract number, district, county, route and post mile of project limits,
D. Company name of certifying vendor, street address, city, state and zip code,
E. Printed name, signature and title of certifying person; and
F. Category 1 temporary traffic control devices that will be used on the project.

The Contractor may obtain a standard form for self-certification from the Engineer.

Category 2 temporary traffic control devices are defined as small and lightweight (less than
100 pounds) devices that are not expected to produce significant vehicular velocity change, but may cause potential harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

Category 2 temporary traffic control devices shall be on the Federal Highway Administration's (FHWA) list of Acceptable Crashworthy Category 2 Hardware for Work Zones. This list is maintained by FHWA and can be located at:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=workzone

The Department also maintains this list at:


Category 2 temporary traffic control devices that have not received FHWA acceptance shall not be used. Category 2 temporary traffic control devices in use that have received FHWA acceptance shall be labeled with the FHWA acceptance letter number and the name of the manufacturer. The label shall be readable and permanently affixed by the manufacturer. Category 2 temporary traffic control devices without a label shall not be used.

If requested by the Engineer, the Contractor shall provide a written list of Category 2 temporary traffic control devices to be used on the project at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use.

Category 3 temporary traffic control devices consist of temporary traffic-handling equipment and devices that weigh 100 pounds or more and are expected to produce significant vehicular velocity change to impacting vehicles. Temporary traffic-handling equipment and devices include crash cushions, truck-mounted attenuators, temporary railing, temporary barrier, and end treatments for temporary railing and barrier.

Type III barricades may be used as sign supports if the barricades have been successfully crash tested, meeting the NCHRP Report 350 criteria, as one unit with a construction area sign attached.

Category 3 temporary traffic control devices shall be shown on the plans or on the Department's Highway Safety Features list. This list is maintained by the Division of Engineering Services and can be found at:

http://www.dot.ca.gov/hq/esc/approved_products_list/HighwaySafe.htm

Category 3 temporary traffic control devices that are not shown on the plans or not listed on the Department's Highway Safety Features list shall not be used.

Full compensation for providing self-certification for crashworthiness of Category 1 temporary traffic control devices and for providing a list of Category 2 temporary traffic control devices used on the project shall be considered as included in the prices paid for the various items of work requiring the use of the Category 1 or Category 2 temporary traffic control devices and no additional compensation will be allowed therefor.
CONSTRUCTION AREA SIGNS:

Construction area signs shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications with Amendments issue date 11/30/10 and these Special Provisions.

Attention is directed to "Furnish Sign" of these special provisions.

Attention is directed to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these Special Provisions. Type II retroreflective sheeting shall not be used on construction area sign panels. Type III, IV, VII, VIII, or IX retroreflective sheeting shall be used for stationary mounted construction area sign panels.

Attention is directed to "Construction Project Information Signs" of these special provisions regarding the number and type of construction project information signs to be furnished, erected, maintained, and removed and disposed of.

Unless otherwise shown on the plans or specified in these special provisions, the color of construction area warning and guide signs shall have black legend and border on orange background, except W10-1 or W47(CA) (Highway-Rail Grade Crossing Advance Warning) sign shall have black legend and border on yellow background.

Orange background on construction area signs shall be fluorescent orange.

Repair to construction area sign panels will not be allowed, except when approved by the Engineer. At nighttime under vehicular headlight illumination, sign panels that exhibit irregular luminance, shadowing or dark blotches shall be immediately replaced at the Contractor's expense.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

<table>
<thead>
<tr>
<th>Notification Center</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground Service Alert-Northern California (USA)</td>
<td>1-800-642-2444</td>
</tr>
<tr>
<td></td>
<td>1-800-227-2600</td>
</tr>
<tr>
<td>Underground Service Alert-Southern California (USA)</td>
<td>1-800-422-4133</td>
</tr>
<tr>
<td></td>
<td>1-800-227-2600</td>
</tr>
</tbody>
</table>

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with portland cement concrete, shall be at least 4 inches greater than the longer dimension of the post cross section.

Construction area signs placed within 15 feet from the edge of the travel way shall be mounted on stationary mounted sign supports as specified in "Construction Area Traffic Control Devices" of these special provisions.
The Contractor shall maintain accurate information on construction area signs. Signs that are no longer required shall be immediately covered or removed. Signs that convey inaccurate information shall be immediately replaced or the information shall be corrected. Covers shall be replaced when they no longer cover the signs properly. The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned, from any cause, during the progress of work.

The Contractor may be required to cover certain signs during the progress of the work. Signs that are no longer required or that convey inaccurate information to the public shall be immediately covered or removed, or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the signs. The retro reflective face of the covered signs shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the signs properly.

The term "construction area signs" shall include temporary object markers required for the direction of public traffic through or around the work during construction. Object markers listed or designated on the plans as construction area signs shall be considered to be signs and shall be furnished, erected, maintained, and removed by the Contractor in the same manner specified for construction area signs.

Object markers shall be stationary mounted on wood or metal posts in conformance with the details shown on the plans and the provisions in Section 82, "Markers and Delineators," of the Standard Specifications.

Marker panels for Type N, Type P and Type R object markers shall conform to the provisions for sign panels for stationary mounted signs.

Target plates for Type K and Type L object markers and posts, reflectors and hardware shall conform to the provisions in Section 82, but need not be new.

The lump sum price paid for “Construction Area Signs” shall constitute full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work to the Construction Area Sign plan sheet in these Special Provisions and no additional compensation will be allowed therefor.

10-2.05 DETOUR:

The Schulte Road Bridge Project will be built in two construction seasons. The upstream half of the bridge will be built during the initial year of construction and the remaining downstream half of the bridge is to be built during the second year of construction. Each year of construction will be divided up into two phases of construction with a total of four stages of construction for the work.

The first phase will consist of the initial setup of the project site for construction. The stage one (A)(utility) will involve the movement of the raw water main that is along the upstream edge of the existing bridge to be placed into a temporary water line on the downstream concrete wheel guard of the existing bridge. Clearing and Grubbing and installation of the temporary construction bridge using clean river run gravel as support mounds will be installed during the startup of stage one (construction).
The existing bridge will be used as the detour to handle the traffic during the first year of construction. This includes stage one (traffic). The bridge is a one lane bridge. Traffic stops at the ends to let traffic on the bridge complete its crossing before moving onto the bridge. This traffic pattern for the existing one lane bridge has been used for years. The residents at the project site are familiar with crossing the one lane bridge in this manor.

The upstream half of the new bridge will be constructed during the stage one (construction). Traffic will be protected from the construction of the upstream half of the bridge by the temporary K railing and crash cushion arrays installed in stage one (traffic).

At the end of the first season of construction or the beginning of the second season of construction the traffic will be placed onto the new half bridge upstream of the existing bridge. The temporary K rails need to be installed prior to traffic using this one lane half of the new bridge. The stage one (B) (utility) of utility relocation which involves locating the Cal Am water, PG&E gas and at the option of the contractor the AT&T telephone and Comcast Cable into the new upstream half of the bridge from the old bridge needs to occur prior to using the new bridge for stage two (traffic) for detour traffic.

At the beginning of the stage two (construction) newly constructed upstream half of the bridge will be fully operational for detour traffic. The existing Schulte Road Bridge will be removed. It is advisable that this bridge be removed in the fall when stream flows in the Carmel River are low. The schedule for the project stages are to be arranged by the contractor with approval by the Engineer.

The stage three (construction) will occur after the completion of the downstream half of the bridge. It will consist primarily of the closure pour and completion of the full roadway and driveways. At the beginning of stage four (construction) and stage four (traffic) the pedestrian railing and upstream barrier rail will be installed. The transfer of traffic to two lanes using the full roadway and bridge will be complete at the end of stage four (construction) and stage four (traffic).

All remaining construction activities will be completed during the end of the stage four (construction). At the end of the final stage of bridge construction, the Contractor will be released from maintenance as indicated in Section 5-1.38 “Relief from maintenance and Responsibility” of these Special Provisions and Section 7-1.15 “Relief from Maintenance and Responsibility” of the Standard Specifications. The plant establishment work will begin after the initial planting of contract revegetation and will continue for the required 5 years as addressed in Section 20-4.08 of the Standard Specifications and Section 10-3.11 “Plant Establishment Work” of these special provisions.

The contract lump sum price paid for item of work “Detour” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing, transferring traffic and maintaining the detour of traffic during the four stages of traffic work. Compensation for work required for the detour but provided by other items of work shall be compensated by the respective items of work involved. These items of work include but are not exclusive to “Temporary Railing (Type K)”, “Temporary Crash Cushion Module”, “Barricade”, “Temporary Retaining Wall” and “Traffic Control System”.  
10-2.06 MAINTAINING TRAFFIC:

Maintaining Traffic shall conform to the provisions in Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and 12, "Construction Area Traffic Control Devices," of the Standard Specifications with Amendments issue date 11-30-10 and to the Section entitled "Public Safety" elsewhere in these Special Provisions.

Closure is defined as the closure of a traffic lane or lanes, including shoulder, ramp or connector lanes, within a single traffic control system.

Closures shall conform to the provisions in "Traffic Control System for Lane Closure" of these special provisions.

The full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays, Special Days, designated legal holidays: after 3:00 p.m. on Fridays and the day preceding designated legal holidays: and when construction operations are not actively in progress.

Work that interferes with public traffic shall be limited to the hours when lane closures are allowed, except for work required under Sections 7-1.08, “Public Convenience,” and Section 7-1.09,"Public Safety" of the Standard Specifications with Amendments issue date 11-30-10.

Under one-way reversing traffic control operations, public traffic may be stopped in one direction for periods not to exceed 20 minutes.

Unless approved by the Engineer, the maximum length of a single stationary lane closure shall be 0.25 miles.

Unless approved by the Engineer, not more than one separate stationary lane closures will be allowed at one time. Concurrent stationary closures shall be spaced no closer than 0.25 miles apart.

During blasting, hauling, slide removal excavation operations, the road may be closed and public traffic stopped for periods not to exceed 30 minutes. After one closure is made, accumulated traffic shall pass through the work before another closure is allowed.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders including sections closed to public traffic.

When work vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators shall be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24(CA) (SHOULDER WORK AHEAD) sign shall be mounted on a crashworthy portable sign support with flags. The sign shall be placed where designated by the Engineer. The sign shall be a minimum of 48" x 48" in size. The Contractor shall immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

A minimum of one paved traffic lane, not less than 10 feet wide, shall be open for use by public
traffic.

If minor deviations from the lane requirement charts are required, a written request shall be submitted to the Engineer at least 15 days before the proposed date of the closure. The Engineer may approve the deviations if there is no significant increase in the cost to the State and if the work can be expedited and better serve the public traffic.

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the C43(CA), SC6-3(CA), SC6-4(CA), W20-1, W21-5b, and C24(CA) signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.

Whenever immediate action is required to prevent impending injury, death, or property damage, and precautions that are the Contractor’s responsibility have not been taken and are not expected to be taken, the County may, after reasonable attempts to notify the Contractor, cause such precautions to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the County. County action or inaction under such circumstances shall not be construed as relieving the Contractor or his/her surety from liability.

When work is not in progress on a trench or other excavation that required a lane closure as permitted by the Engineer, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not less than the spacing used for the lane closure.

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of traffic lane; however, the Contractor shall not reduce the width of an existing lane to less than 11 feet without written approval from the Engineer. The lane closure provisions of this section shall not apply if permanent or temporary railing or barrier protects the work area.

Designated legal holidays are:

- January 1st 2012, Sunday
- January 2nd 2012, Monday
- January 16th 2012, Monday
- February 20th 2012, Monday
- May 28th 2012, Monday
- July 4th 2012, Wednesday
- September 3rd 2012, Monday
- November 11th 2012, Sunday
- November 12th 2012, Monday
- November 22nd 2012, Thursday
- November 23rd 2012, Friday
- December 24th 2012, Monday
- December 25th 2012, Tuesday
- December 31st 2012, Monday
- January 1st 2013, Tuesday

New Years Day
Day after New Years Day
Martin Luther King, Jr. Birthday
Presidents Day
Memorial Day
Independence Day
Labor Day
Veteran’s Day
Day after Veteran’s Day
Thanksgiving Day
Day after Thanksgiving Day
Christmas Eve
Christmas Day
New Years Eve
New Years Day
January 21\textsuperscript{st} 2013, Monday & Martin Luther King, Jr. Birthday \\
February 18\textsuperscript{th} 2013, Monday & Presidents Day \\
May 27\textsuperscript{th} 2013, Monday & Memorial Day \\
July 4\textsuperscript{th} 2013, Thursday & Independence Day \\
September 2\textsuperscript{nd} 2013, Monday & Labor Day \\
November 11\textsuperscript{th} 2013, Monday & Veteran's Day \\
November 28\textsuperscript{th} 2013, Thursday & Thanksgiving Day \\
November 29\textsuperscript{th} 2013, Friday & Day after Thanksgiving Day \\
December 24\textsuperscript{th} 2013, Tuesday & Christmas Eve \\
December 25\textsuperscript{th} 2013, Wednesday & Christmas Day

The construction operating hours are from 7:00 a.m. to 5:00 p.m. Monday through Saturday as required by the Schulte Road Bridge Environmental Impact Report mitigation measures.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request to the Engineer from the Contractor. Request for change in lanes closure procedures to handle traffic and construction work hours will be accepted if in the opinion of the Engineer, the impact to public traffic will be better served. Such deviations shall not be adopted until the Engineer has indicated his written approval. All other modifications will be made by contract change order.

The costs for maintaining traffic as specified in these special provisions and the Standard Specifications shall be considered as included in other items of work and no additional compensation will be allowed therefor.

10-2.07 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE:

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, the provisions under "Maintaining Traffic" and "Construction Area Signs" of these special provisions, and these special provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications with Amendments issue date 11-30-10.

If components in the traffic control system are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

When lane closures are made for work periods only, at the end of each work period, components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations designated by the Engineer within the limits of the highway right of way.
One-way traffic shall be controlled through the project in conformance with the plan entitled "Traffic Control System for Lane Closure on Two Lane Conventional Highways" and these special provisions.

When traffic is under one-way control on unpaved areas, the cones shown along the centerline on the plans need not be placed.

Utilizing a pilot car will be at the option of the Contractor. If the Contractor elects to use a pilot car, the cones shown along the centerline on the plan need not be placed. The pilot car shall have radio contact with personnel in the work area. The maximum speed of the pilot car through the traffic control zone shall be 25 miles per hour.

The contract lump sum price paid for "Traffic Control System" shall include full compensation for furnishing all labor (except for flagging costs), materials (including signs), tools, equipment, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system and for furnishing and operating the pilot car, (including driver, radios, other equipment, and labor required), as shown on the plans, as specified in the Standard Specifications with Amendment issue date 11-30-10 and these special provisions, and as directed by the Engineer.

Flagging costs will be paid for as provided in Section 12-2.02, "Flagging Costs," of the Standard Specifications.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications with Amendments issue date 11-30-10 shall not apply to the item of "Traffic Control System. Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. The adjustment will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications for increased work and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.03D of the Standard Specifications with Amendments issue date 11-30-10, will be paid for as a part of the extra work.

10-2.08 TEMPORARY PAVEMENT DELINEATION:

Temporary pavement delineation shall be furnished, placed, maintained, and removed in conformance with the provisions in Section 12-3.01, "General," of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the California MUTCD or Manual of Traffic Controls latest edition, published by Caltrans or as relieving the Contractor from the responsibilities specified in Section 7-1.09, "Public Safety," of the Standard Specifications with Amendments issue date 11-30-10.

10-2.08A GENERAL:

When the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place before opening the traveled way to public traffic. Laneline or centerline pavement delineation shall be provided for traveled ways open to public traffic.
Work necessary, including required lines or markers, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive application of paint or removable traffic tape temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation, or as determined by the Engineer. Temporary pavement markers and removable traffic tape that conflicts with a new traffic pattern or that is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

Temporary pavement delineation shall be used on or adjacent to lanes open to public traffic for a maximum of 14 days. Before the end of the 14 days, the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 days, additional temporary pavement delineation shall be provided by the Contractor at no additional cost to the Department. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer.

Painted traffic stripe used for temporary delineation shall conform to Section 84-3, "Painted Traffic Stripes and Pavement Markings," of the Standard Specifications, except for payment. The number of coats shall be, at the option of the Contractor, either one or 2 coats. The quantity of painted traffic stripe used for temporary delineation will not be included in the quantities of paint traffic stripe to be paid for.


Whenever edgelines, lanelines or centerlines are obliterated, the minimum edgeline, laneline and centerline delineation to be provided for that area shall be traffic tape or day/night raised retro-reflectorized pavement markers.

Full compensation for furnishing, placing, maintaining and removing temporary pavement delineation shall be considered as included in the contract price paid for the item of work "Traffic Control System" and no separate payment will be made therefor.

10-2.09 EXISTING HIGHWAY FACILITIES:

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

Except as otherwise provided for damaged materials in Section 15-2.04, "Salvage," of the Standard Specifications, the materials to be salvaged shall remain the property of the County and shall be cleaned, packaged, bundled, tagged, and placed within the road construction area.

Attention is directed to Section 7-1.06, "Safety and Health Provisions," of the Standard Specifications with Amendments issue date 11-30-10. Work practices and worker health and safety shall conform to the California Division of Occupational Safety and Health Construction Safety Orders.
Title 8, of the California Code of Regulations including Section 5158, "Other Confined Space Operations."

10-2.10 EXISTING PAINT SYSTEMS:

The existing paint systems on County Bridge Number 501, State Bridge Number 44C0115 consist of heavy metals. Any work that disturbs the existing paint system will expose workers to health hazards and will (1) produce debris containing heavy metal in amounts that exceed the thresholds established in Titles 8 and 22 of the California Code of Regulations or (2) produce toxic fumes when heated. All debris produced when the existing paint system is disturbed shall be contained.

10-2.10A DEBRIS CONTAINMENT AND COLLECTION PROGRAM:

Prior to starting work, the Contractor shall submit a Debris Containment and Collection Program to the Engineer in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, for debris produced when the existing paint system is disturbed. The Program shall identify materials, equipment, and methods to be used when the existing paint system is disturbed and shall include working drawings of containment systems, loads applied to the bridge by containment structures, and provisions for ventilation and air movement for visibility and worker safety.

If the measures being taken by the Contractor are inadequate to provide for the containment and collection of debris produced when the existing paint system is disturbed, the Engineer will direct the Contractor to revise the operations and the Debris Containment and Collection Program. The directions will be in writing and will specify the items of work for which the Contractor's debris containment and collection program is inadequate. No further work shall be performed on the items until the Debris Containment and Collection Program is adequate and, if required, a revised Program has been approved for the containment and collection of debris produced when the existing paint system is disturbed.

The Engineer will notify the Contractor of the approval or rejection of the submitted or revised Debris Containment and Collection Program within 2 weeks of submittal of the Contractor's Program or revised Program.

The State will not be liable to the Contractor for failure to approve all or any portion of an originally submitted or revised Debris Containment and Collection Program, nor for delays to the work due to the Contractor's failure to submit an acceptable Program.

Full compensation for the Debris Containment and Collection Program shall be considered as included in the contract price paid for "Bridge Removal" or the item of work causing the existing paint system to be disturbed, and no additional compensation will be allowed therefor.

10-2.10B SAFETY AND HEALTH PROVISIONS:

Attention is directed to Section 7-1.06, "Safety and Health Provisions," of the Standard Specifications. Work practices and worker health and safety shall conform to the California Code of Regulations, Title 8, Construction Safety Orders, including Section 1532.1, "Lead."

The Contractor shall furnish the Engineer a written Code of Safe Practices and shall implement an Injury and Illness Prevention Program and a Hazard Communication Program in conformance with the requirements of Construction Safety Orders, Sections 1509 and 1510.
Prior to starting work that disturbs the existing paint system, and when revisions to the program are required by Section 1532.1, "Lead," the Contractor shall submit the compliance programs required in subsection (e)(2), "Compliance Program," of Section 1532.1, "Lead," of the Construction Safety Orders to the Engineer in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The compliance programs shall include the data specified in subsections (e)(2)(B) and (e)(2)(C) of Section 1532.1, "Lead." Approval of the compliance programs by the Engineer will not be required. The compliance programs shall be reviewed and signed by a Certified Industrial Hygienist (CIH) who is certified in comprehensive practice by the American Board of Industrial Hygiene (ABHI). Copies of all air monitoring or jobsite inspection reports made by or under the direction of the CIH in conformance with Section 1532.1, "Lead," shall be furnished to the Engineer within 10 days after the date of monitoring or inspection.

Full compensation for furnishing the Engineer with the submittals and for implementing the programs required by this safety and health section shall be considered as included in the contract price paid for “Bridge Removal” or the item of work causing the existing paint system to be disturbed, and no additional compensation will be allowed therefor.

10-2.10C DEBRIS HANDLING:

Debris produced when the existing paint system is disturbed shall not be temporarily stored on the ground. Debris accumulated inside the containment system shall be removed before the end of each work shift. Debris shall be stored in approved, leakproof containers and shall be handled in such a manner that no spillage will occur.

Disposal of debris produced when the existing paint system is disturbed shall be performed in conformance with all applicable Federal, State, and local hazardous waste laws. Laws that govern this work include:

B. Title 22; California Code of Regulations, Division 4.5, (Environmental Health Standards for the Management of Hazardous Waste).
C. Title 8, California Code of Regulations.

Except as otherwise provided herein, debris produced when the existing paint system is disturbed shall be disposed of by the Contractor at an approved Class 1 disposal facility in conformance with the requirements of the disposal facility operator. The debris shall be hauled by a transporter currently registered with the California Department of Toxic Substances Control using correct manifesting procedures and vehicles displaying current certification of compliance. The Contractor shall make all arrangements with the operator of the disposal facility and perform any testing of the debris required by the operator.

At the option of the Contractor, the debris produced when the existing paint system is disturbed may be disposed of by the Contractor at a facility equipped to recycle the debris, subject to the following requirements:

A. Copper slag abrasive blended by the supplier with a calcium silicate compound shall be used for blast cleaning.
B. The debris produced when the existing paint system is disturbed shall be tested by the Contractor to confirm that the solubility of the heavy metals is below regulatory limits and that the debris may be transported to the recycling facility as a nonhazardous waste.

C. The Contractor shall make all arrangements with the operator of the recycling facility and perform any testing of the debris produced when the existing paint system is disturbed that is required by the operator.

Full compensation for debris handling and disposal shall be considered as included in the contract price paid for “Bridge Removal” or the item of work causing the existing paint system to be disturbed, and no additional compensation will be allowed therefor.

10-2.11 BARRICADE:

Barricades shall be furnished, placed and maintained at the locations shown on the plans, specified in the Standard Specifications or in these special provisions or where designated by the Engineer. Barricades shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Attention is directed to "Prequalified and Tested Signing and Delineation Materials" of these special provisions regarding retroreflective sheeting for barricades.

Sign panels for construction area signs and marker panels installed on barricades shall conform to the provisions in Section 12-3.06A, "Stationary Mounted Signs," of the Standard Specifications with Amendments issue date 11-30-10.

Full compensation for furnishing, installing, maintaining, and removing construction area signs and marker panels on barricades shall be considered as included in the contract unit price paid for the type of barricade involved and no separate payment will be made therefor.

Barricades shall be compensated as indicated in Section 12-4.01 “Measurement and Payment” of the Standard Specifications and these Special Provisions.

10-2.12 TEMPORARY RAILING (TYPE K)

Temporary railing (Type K) shall be placed as shown on the plans, as specified in the Standard Specifications with Amendments issue date 11-30-10 or these special provisions or where ordered by the Engineer and shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Reflectors on temporary railing (Type K) shall conform to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

Attention is directed to "Public Safety" and "Order of Work" of these special provisions.

Temporary railing (Type K) placed in conformance with the provisions in "Public Safety" of these special provisions will be neither measured nor paid for.
Measurement and Payment for Temporary Railing (Type K) shall be as indicated in Section 12-4.01 “Measurement and Payment” of the Standard Specifications.

Temporary Railing (Type K) will be supplied and installed during the stage one traffic detour and moved laterally to a new position for stage two (traffic) and stage three (traffic) detour. The temporary Railing (Type K) will be removed from the upstream half of the bridge at the beginning of stage four traffic and from the center of the bridge at the end of stage four traffic and prior to the use of the bridge for two lanes by the public.

The lateral movement of Temporary Railing (Type K) previously supplied, installed and used to a new position shall be included in the price for Item of Work “Reset Temporary Railing (Type K)” and shall not be paid for as extra work as discussed in Section 12-4.01 “Measurement and Payment” of the Standard Specifications with Amendments issue date 11-30-10. Measurement and Payment for the Item of Work “Reset Temporary Railing (Type K)” shall be for the length of Temporary Railing (Type K) that has been laterally moved.

10-2.13 TEMPORARY CRASH CUSHION MODULE:

This work shall consist of furnishing, installing, and maintaining sand filled temporary crash cushion modules in groupings or arrays at each location shown on the plans, as specified in these special provisions or where designated by the Engineer. The grouping or array of sand filled modules shall form a complete sand filled temporary crash cushion in conformance with the details shown on the plans and these special provisions.

Temporary crash cushions shall be secured in place prior to commencing work for which the temporary crash cushions are required.

Attention is directed to "Public Safety," "Order of Work," and "Temporary Railing" of these special provisions.

Whenever the work or the Contractor's operations establishes a fixed obstacle, the exposed fixed obstacle shall be protected with a sand filled temporary crash cushion. The sand filled temporary crash cushion shall be in place prior to opening the lanes adjacent to the fixed obstacle to public traffic.

Sand filled temporary crash cushions shall be maintained in place at each location, including times when work is not actively in progress. Sand filled temporary crash cushions may be removed during a work period for access to the work provided that the exposed fixed obstacle is 15 feet or more from a lane carrying public traffic and the temporary crash cushion is reset to protect the obstacle prior to the end of the work period in which the fixed obstacle was exposed. When no longer required, as determined by the Engineer, sand filled temporary crash cushions shall be removed from the site of the work.

Sand filled temporary crash cushion modules shall be one of the following, or equal, and manufactured after March 31, 1997:

A. Energite III and Fitch Inertial Modules, manufactured by Energy Absorption Systems, Inc., 35 East Wacker Drive, Suite 1100, Chicago, IL 60601:
1. Northern California: Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, telephone (800) 884-8274, FAX (916) 387-9734
2. Southern California: Traffic Control Service, Inc., 1818 East Orangethorpe, Fullerton, CA 92831-5324, telephone (800) 222-8274, FAX (714) 526-9501

B. Traffix Sand Barrels, manufactured by Traffix Devices, Inc., 220 Calle Pintoresco, San Clemente, CA 92672, telephone (949) 361-5663, FAX (949) 361-9205

1. Northern California: United Rentals, Inc., 1533 Berger Drive, San Jose, CA 95112, telephone (408) 287-4303, FAX (408) 287-1929
2. Southern California: Statewide Safety & Sign, Inc., P.O. Box 1440, Pismo Beach, CA 93448, telephone (800) 559-7080, FAX (805) 929-5786

C. CrashGard Model CC-48 Sand Barrels, manufactured by Plastic Safety Systems, Inc., 2444 Baldwin Road, Cleveland, OH 44104:

1. Northern California: Capitol Barricade Safety & Sign, 6329 Elvas Ave, Sacramento, CA 95819, telephone (888) 868-5021, FAX (916) 451-5388
2. Northern California: Sierra Safety, Inc. 9093 Old State Highway, New Castle, CA 95658, telephone (916) 663-2026, FAX (916) 663-1858
3. Southern California: Hi Way Safety Inc., 13310 5th Street, Chino, CA 91710, telephone (909) 591-1781, FAX (909) 627-0999

Modules contained in each temporary crash cushion shall be of the same type at each location. The color of the modules shall be the standard yellow color, as furnished by the vendor, with black lids. The modules shall exhibit good workmanship free from structural flaws and objectionable surface defects. The modules need not be new. Good used undamaged modules conforming to color and quality of the types specified herein may be utilized. If used Fitch modules requiring a seal are furnished, the top edge of the seal shall be securely fastened to the wall of the module by a continuous strip of heavy duty tape.

Modules shall be filled with sand in conformance with the manufacturer's directions, and to the sand capacity in pounds for each module shown on the plans. Sand for filling the modules shall be clean washed concrete sand of commercial quality. At the time of placing in the modules, the sand shall contain not more than 7 percent water as determined by California Test 226.

Modules damaged due to the Contractor's operations shall be repaired immediately by the Contractor at the Contractor's expense. Modules damaged beyond repair, as determined by the Engineer, due to the Contractor's operations shall be removed and replaced by the Contractor at the Contractor's expense.

Temporary crash cushion modules may be placed on movable pallets or frames and shall conform to the dimensions shown on the plans. The pallets or frames shall provide a full bearing base beneath the modules. The modules and supporting pallets or frames shall not be moved by sliding or skidding along the pavement or bridge deck.

A Type R or P marker panel shall be attached to the front of the crash cushion as shown on the
plans, when the closest point of the crash cushion array is within 12 feet of the traveled way. The marker panel, when required, shall be firmly fastened to the crash cushion with commercial quality hardware or by other methods determined by the Engineer.

At the completion of the project, temporary crash cushion modules, sand filling, pallets or frames, and marker panels shall become the property of the Contractor and shall be removed from the site of the work. Temporary crash cushion modules shall not be installed in the permanent work.

Temporary crash cushion modules placed in conformance with Section 7-1.09, “Public Safety,” of the Standard Specifications will not be measured nor paid for.

Temporary crash cushion modules will be measured by the unit as determined from the actual count of modules as used in the work or ordered by the Engineer at each location. Temporary crash cushion modules placed in conformance with the provisions in "Public Safety" of the Standard Specifications with Amendments issue date 11-30-10 and modules placed in excess of the number specified or shown will not be measured nor paid for.

Repairing modules damaged by public traffic will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications. Modules damaged beyond repair by public traffic, when ordered by the Engineer, shall be removed and replaced immediately by the Contractor. Modules replaced due to damage by public traffic will be measured and paid for as temporary crash cushion module.

If the Engineer orders a lateral move of the sand filled temporary crash cushions and the repositioning is not shown on the plans, moving the sand filled temporary crash cushion will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications and these temporary crash cushion modules will not be counted for payment in the new position.

The contract unit price paid for temporary crash cushion module shall include full compensation for furnishing all labor, materials (including sand, pallets or frames and marker panels), tools, equipment, and incidentals, and for doing all the work involved in furnishing, installing, maintaining, moving, and resetting during a work period for access to the work, and removing from the site of the work when no longer required (including those damaged by public traffic) sand filled temporary crash cushion modules, complete in place, as shown on the plans, as specified in the Standard Specifications with Amendments issue date 11-30-10 and these special provisions, and as directed by the Engineer.

10-2.14 TEMPORARY RETAINING WALL:
Temporary Retaining Wall shall be placed as shown on the plans, as specified in the Standard Specifications with Amendments issue date 11-30-10 or these special provisions or where ordered by the Engineer. The proposed temporary retaining wall system item “Temporary Retaining Wall” will be used to provide for support of soil were vertical grade differences and limited space for construction exist. Temporary Retaining Walls are shown on the plans to retain the raised approaches for half the roadway during staged construction. It is also shown to retain the soil around the footing of the existing bridge that is presently retained by a steel sheet pile wall.

It will be necessary to provide a temporary retaining wall adjacent to the AT&T telephone poles as shown on the plans in order to construct the down stream abutment wingwalls.
Temporary Retaining Wall may be constructed of steel sheet pile, solder pile wall, timber retaining wall, crib wall, interlocking masonry wall, concrete block wall, reinforced earth wall, geogrid retaining wall or any retaining wall system common to construction work. Temporary Retaining Walls planned for use by the contractor shall be submitted for approval by the Engineer and shall include design calculations for the height of the design by a civil engineer registered in California.

"Temporary Retaining Wall" shall be measured by the linear foot along the top of the wall at each location shown on the plan, specified, or ordered by the Engineer. Payment for item of work "Temporary Retaining Wall" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the temporary retaining wall, complete in place, including any necessary excavation and backfill and the removal of the temporary retaining wall when no longer required. Payment shall also include the required design calculations for the design by a professional civil engineer.

10-2.15 TEMPORARY SHORING:

Temporary shoring, at the abutments for the stages of construction shown on the plans, shall be designed, furnished, constructed, monitored, maintained, and removed in conformance with the provisions in these special provisions.

Construction staging shall be as shown on the plans. Proposed changes to the construction sequence and application of temporary shoring loads shall be subject to the Engineer's approval.

Attention is directed to the sections "Order of Work" and "Maintaining Traffic" of these special provisions regarding the construction sequences and the required use by public traffic.

Approval by the Engineer of the temporary shoring working drawings or temporary shoring inspection performed by the Engineer will in no way relieve the Contractor of full responsibility for the temporary shoring.

10-2.15A TEMPORARY SHORING DESIGN AND DRAWINGS:

The Contractor shall submit to the Engineer working drawings and design calculations for the temporary shoring. Such drawings and design calculations shall be signed by an engineer who is registered as a Civil Engineer in the State of California. The temporary shoring working drawings and design calculations shall conform to the requirements in Section 5-1.02 "Plans and Working Drawings," of the Standard Specifications. The number of sets of drawings and design calculations for temporary shoring shall be the same as specified for falsework working drawings in Section 51-1.06A, "Falsework Design and Drawings," of the Standard Specifications. The time to be provided for the Engineer's review of the working drawings shall be five weeks.

Working drawings for the temporary shoring shall include stress sheets, anchor bolt layouts, shop details, and construction and removal plans.

The temporary shoring working drawings shall include descriptions and values of all loads, including construction equipment loads, descriptions of equipment to be used, complete details and calculations for shoring the new and existing structures and approach roadways and descriptions of the displacement monitoring system. The displacement monitoring system shall include equipment to be
used, location of control points, method and schedule of taking measurements, and provisions to adjust the structure, shoring, or roadway should unanticipated or excessive movement or settlement occur.

The Contractor may use the permanent piles as part of the temporary shoring. Permanent piles shall not be moved or adjusted from the locations shown on the plans. Any use of the permanent piles and the loads imposed on them shall be shown on the temporary shoring drawings.

Should the Contractor propose to provide piles longer than required for the work in order to support the temporary shoring above the elevation of the top of the footing and later cut off the piles at their final elevation, shear devices adequate to transfer all pile reactions into the footing will be required. The pile shear devices shall be designed by the Contractor and submitted to the Engineer for review. The Contractor shall allow 3 weeks for the Engineer's review.

Temporary shoring footings shall be designed to carry the load imposed upon them without exceeding the estimated soil bearing values and anticipated settlements.

Bracing shall be provided as necessary to withstand all imposed loads during erection and removal of any temporary shoring. The temporary shoring drawings shall show provisions for such temporary bracing or methods to be used to conform to these requirements during each phase of construction and removal.

The temporary shoring design calculations shall show a summary of computed stresses in (1) temporary shoring, (2) connections between temporary shoring and the existing structure, and (3) existing load supporting members. The computed stresses shall include the effect of the construction sequence. The temporary shoring design calculations shall also include a lateral stiffness assessment of the temporary shoring system.

The design of temporary shoring will not be approved unless it is based on the use of loads and conditions which are no less severe than those described in "Temporary Shoring Design Criteria" of these special provisions and on the use of allowable stresses which are no greater than those described in Section 51-1.06A(2), "Design Stresses, Loadings, and Deflections," of the Standard Specifications.

If falsework loads are imposed on temporary shoring, the temporary shoring shall also satisfy the deflection criteria described in Section 51-1.06A(2), "Design Stresses, Loadings, and Deflections," of the Standard Specifications.

10-2.15B TEMPORARY SHORING DESIGN CRITERIA:

The temporary shoring shall support the minimum temporary shoring design loads and the lateral design forces shown on the working drawings. The vertical surcharge design loads shall be adjusted for the weight of temporary shoring, construction equipment loads, and additional loads imposed by the Contractor's operations. The construction equipment loads shall be the actual weight of the construction equipment but in no case shall be less than 20 psf of horizontal contributory surface area.

The temporary shoring shall resist the specified lateral design forces applied at the point where the embankment to be shored meets the abutment backwall. The lateral design forces to be resisted shall be increased to be compatible with the temporary shoring lateral stiffness if the stiffness exceeds the specified minimum.
The new or existing structure may be mechanically connected to the temporary shoring. The mechanical connections shall be capable of resisting the lateral temporary shoring design forces. Friction forces developed between the new or existing structure and temporary shoring shall not be used to reduce the lateral forces and shall not be considered as an effective mechanical connection. The mechanical connections shall be designed to tolerate adjustments to the temporary shoring throughout the required use of the temporary shoring.

Manufactured Assemblies

Manufactured assemblies shall conform to the provisions in Section 51-1.06A(2), "Design Stresses, Loadings, and Deflections," of the Standard Specifications.

Special Locations

Attention is directed to Section 51-1.06A(3) "Special Locations," of the Standard Specifications. All reference to falsework in this section shall also apply to temporary shoring.

Temporary crash cushion modules, as shown on the plans and conforming to the provisions in “Temporary Crash Cushion Module” of these special provisions, shall be installed at the approach end of temporary railings less than 15 feet from the edge of a traffic lane. For two-way traffic openings, temporary crash cushion modules shall be installed at the departing end of temporary railings less than 6 feet from edge of a traffic lane.

Temporary crash cushion modules, if required, shall be installed before beginning construction of temporary shorings. Temporary crash cushion modules at temporary supports shall not be removed until the removal is approved in writing by the Engineer.

Temporary crash cushion modules installed as specified above will be measured and paid for as provided in “Temporary Crash Cushion Module” of these special provisions and shall include full compensation for furnishing, placing, maintaining, repairing, locations as specified in the Standard Specifications with Amendments issue date 11-30-10 and these special provisions, and no separate payment will be made therefor.

10-2.15C TEMPORARY SHORING CONSTRUCTION:

Attention is directed to paragraphs 1 through 7 of Section 51-1.06B, "Falsework Construction," of the Standard Specifications. All reference to falsework in these paragraphs shall also apply to temporary shoring.

Welding, welder qualification, and inspection of welding for all steel members shall conform to the requirements of AWS D1.1. Prior to proceeding with bridge removal, an engineer for the Contractor who is registered as a Civil Engineer in the State of California shall inspect the temporary shoring for conformity with the working drawings. The Contractor's registered engineer shall certify in writing that
the temporary shoring, including displacement monitoring systems, conform to the working drawings, and that the material and workmanship are satisfactory for the purpose intended. A copy of this certification shall be available at the site of the work at all times.

The Contractor's registered engineer shall be present at the bridge site at all times when adjustments are in progress and when bridge removal operations are in progress. The Contractor's registered engineer shall inspect the removal operation and report in writing on a daily basis the progress of the operation and the status of the remaining structure. A copy of the daily report shall be available at the site of the work at all times. Should an unplanned event occur, the Contractor's registered engineer shall submit immediately to the Engineer for approval, the procedure or proposed operation to correct or remedy the occurrence.

The Contractor shall perform an initial survey as part of the displacement monitoring system to record the location of the existing structure prior to the commencement of any work. Additional surveys shall be performed as specified in this special provision. Two copies of each survey shall be signed by an engineer, who is registered as a Civil Engineer in the State of California, and submitted to the Engineer.

Vandal-resistant displacement monitoring equipment shall be provided and maintained. Vertical and horizontal displacements of the temporary shoring and the new and existing structures shall be monitored continuously during construction operations and embankment construction and shall be accurately measured and recorded at least monthly during winter shutdown. As a minimum, elevations and lateral positions shall be monitored. The records of vertical and lateral displacements shall be signed by an engineer who is registered as a Civil Engineer in the State of California and available to the Engineer at the jobsite during normal working hours, and a copy of the record shall be delivered to the Engineer at the completion of construction of temporary shoring, after each major storm event but in no case longer than once every 30 calendar days during the winter shutdown, and before the start of second season construction operations.

Embankment operations shall be carefully controlled and monitored to ensure that the applied loads do not cause distortion and excessive stresses that would damage the new structure or temporary shoring.

Should unanticipated displacements, cracking, or other damage or distress occur, the embankment construction shall be discontinued until corrective measures satisfactory to the Engineer are performed. Damage to the structure as a result of the Contractor's operations shall be repaired by the Contractor in conformance with the provisions in Section 7-1.11, "Preservation of Property," of the Standard Specifications with Amendments issue date 11-30-10.

10-2.15D REMOVING TEMPORARY SHORING:

Attention is directed to Section 51-1.06C, "Removing Falsework," of the Standard Specifications with Amendments issue date 11-30-10. All references to falsework in this section shall also apply to temporary shoring, except that when public traffic is carried on the embankment supported by the temporary shoring, no temporary shoring shall be removed until the roadway open to public traffic has been made safe.

Temporary shoring shall be removed to the limits specified in Section 15-4, "Bridge Removal,"
of the Standard Specifications. Temporary shoring beyond those limits may be abandoned in place if not in conflict with utility facilities.

Attachments shall be removed from the new structure and extant abutment substructure and exposed concrete surfaces restored as shown on the plans.

10-2.15E MEASUREMENT AND PAYMENT:
Temporary shoring will not be measured for payment. Full compensation for temporary shoring shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

10-2.16 REMOVE ROADSIDE SIGN:
Existing roadside signs, at those locations shown on the plans to be removed, shall be removed and stored at a location within the construction site as indicated by the Engineer.

Existing roadside signs shall not be removed until replacement signs have been installed or until the existing signs are no longer required for the direction of public traffic, unless otherwise directed by the Engineer.

Payment and Measurement for item of work “Remove Roadside Sign” shall be as indicated in Section 15-2.06 “Measurement” and Section 15-2.07 “Payment” of the Standard Specifications.

10-2.17 RECONSTRUCT FENCE:
The existing Wood Fence shall be removed and a fence of similar design shall be installed in its place at the locations shown on the plans. Material salvaged from the removed fence may be used to construct the new fence at the new location with approval by the Engineer. Fence material that has been damaged beyond practical use as determined by the Engineer shall be replaced with new fence posts and planks.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in removing the existing wood fence and installing the new fence shall be included in the contract price per linear foot for “Reconstruct Fence” and no additional compensation shall be allowed therefor.

10-2.18 SALVAGE CHAIN LINK FENCE:
Existing chain link fence shall be removed at the locations shown on the plans and stockpiled at a location as indicated by the Engineer.

Full compensation for removing and stockpiling existing chain link fence shall be considered as included in the contract price paid per linear foot for “Salvage Chain Link Fence” and no separate payment will be made therefor.
10-2.19 CONSTRUCT SPLIT RAIL FENCE:

The Split Rail Wood Fence shall be constructed at the locations and with the details shown on the plans and as directed by the Engineer. Material for the split rail fence shall be split or rough cut red cedar as shown on the plans and as directed by the Engineer. The split rail fence will include a Pedestrian gate and a vehicle gate as shown on the plans.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in constructing the split rail wood fence including the pedestrian gate and vehicle gate shall be included in the contract price per linear foot for “Split Rail Fence” and no additional compensation shall be allowed therefor.

10-2.20 INSTALL (SALVAGED) GATE WITH POSTS:

Gates with Posts shall be removed and salvaged for installation at a new location with reconstructed wood as shown on the plans and as directed by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in removing the existing Gates with Posts and installing the Salvaged Gate with Posts at a new location shall be included in the contract price per each for “Install (Salvaged) Gate With Posts” and no additional compensation shall be allowed therefor.

10-2.21 RESET MAILBOX:

Existing mailboxes shall be removed and reset in conformance with the details shown on the plans.

During construction operations, the mailboxes shall be moved as necessary to clear the way for the Contractor’s operations, but shall be accessible for delivery at all times. During construction, the mailboxes shall be installed on posts set in the ground or the mailboxes may be installed on temporary supports approved by the Engineer.

When construction is complete, the mailboxes shall be installed in the final position on new redwood posts. If the existing post consists of steel, the existing post shall be removed and reinstalled in the new location as shown on the plans and as directed by the Engineer.

Redwood posts shall conform to the provisions for sign posts in Section 56-2.02B, "Wood Posts," of the Standard Specifications.

The space around the posts shall be backfilled with earthy material. The backfill material shall be placed in layers approximately 4 inches thick and each layer shall be moistened and thoroughly compacted.

Existing posts, mounts, and hardware not reused shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

Newspaper boxes on individual posts will be considered as mailboxes for measurement and payment.
Newspaper boxes attached to existing mailbox posts shall be removed and fastened to the new mailbox posts and no separate payment will be made therefor.

Full compensation for disposing of existing posts, mounts, and hardware; moving and maintaining the mailboxes (regardless of the number of moves required); and for furnishing new posts, planks, and hardware shall be considered as included in the contract unit price paid for item of work “Reset Mailbox” and no additional compensation will be allowed therefor.

10-2.22 RESET FISH AND GAME BOX-ONE POST:
Existing Fish and Game Box shall be removed and reset in conformance with the details shown on the plans.

During construction operations, the Fish and Game Box shall be moved as necessary to clear the way for the Contractor's operations but shall be salvaged for later installation. During the end of construction, the Fish and Game Box shall be installed on the post set in the ground at a location as approved by the Engineer.

Full compensation for item of work “Reset Fish and Game Box-One Post” shall be as indicated in Section 15-2.07 “Payment” of the Standard Specifications and no additional compensation will be allowed therefor.

10-2.23 RELOCATE WATER METER, RELOCATE WATER VALVE, ADJUST WATER METER AND ADJUST WATER VALVE:
Water meters and water valves shall be relocated or adjusted to grade in accordance with the provisions in Section 15-2.05, “Reconstruction,” Sections 8-1.10, “Utility and Non-Highway Facilities,” and Section 15, “Existing Highway Facilities,” of the Standard Specifications and these Special Provisions. The Contractor shall give three days’ advance written notice to the owners of all utility companies prior to moving items.

Measurement and Payment for items of work “Adjust Water Meter”, “Adjust Water Valve”, Relocate Water Meter” and “Relocate Water Valve” shall be as indicated in Sections 15-2.06 “Measurement” and Section 15-2.07 “Payment” of the Standard Specifications with Amendments issue date 11-30-10. The Water Air Valve shown on the plans to be relocated will be included in the quantity for “Relocate Water Valve”.

10-2.24 OBLITERATE SURFACING:
Existing surfacing, when no longer required for the passage of public traffic, shall be obliterated at the locations shown on the plans.

Surfacing shall not be obliterated by the earth cover method.

Obliteration shall consist of rooting, plowing, pulverizing or scarifying the existing surfacing in conformance with the provisions in Section 15-2.02A, "Obliterating Roads and Detours," of the Standard Specifications.
10-2.25 COLD PLANE ASPHALT CONCRETE PAVEMENT:

Attention is directed to Section 42, "Groove and Grind Pavement," of the Standard Specifications with Amendments issue date 11-30-10. All reference to falsework in these paragraphs shall also apply to temporary shoring.

Existing asphalt concrete pavement shall be cold planed by grinding at the locations and to the dimensions shown on the plans.

Planing asphalt concrete pavement shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method.

Cold planing machines shall be equipped with a cutter head not less than 30 inches in width and shall be operated so that no fumes or smoke will be produced. The cold planing machine shall plane the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation.

The first sentence of Section 42-2.02 “Construction” shall be amended to read “…or carbide tip cutting blades”.

The depth, width, and shape of the cut shall be as shown on the typical cross sections or as designated by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. Planing asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place.

Planed widths of pavement shall be continuous except for intersections at cross streets where the planing shall be carried around the corners and through the conform lines. Following planing operations, a drop-off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic.

Where transverse joints are planed in the pavement at conform lines no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a slope of 1:30 (Vertical: Horizontal) or flatter to the level of the planed area.

Asphalt concrete for temporary tapers shall be commercial quality and may be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete tapers shall be completely removed, including the removal of loose material from the underlying surface, before placing the permanent surfacing. The removed material shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10. Removal operations of cold planed material shall be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer.
Cold plane asphalt concrete pavement will be measured by the square yard. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the depth shown on the plans.

The contract price paid per square yard for “cold plane asphalt concrete” pavement shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold planing asphalt concrete surfacing and disposing of planed material, including furnishing the asphalt concrete for and constructing, maintaining, removing, and disposing of temporary asphalt concrete tapers, as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

10-2.26 BRIDGE REMOVAL:

Removing bridges or portions of bridges shall conform to the provisions in Section 15-4, "Bridge Removal," of the Standard Specifications and these special provisions.

The existing Schulte Road Bridge at Carmel River, County Number 501, State Number 44C0115, shall be removed including pile cap removal, pile removal, and cofferdam removal at existing Pier 4 to allow for the construction of new Pier 2 and excluding portions of abutment substructures as shown on the plans. Portions of this work shall require partial diversion of the river and will be below the groundwater level and may require dewatering during removal.

The existing bridge abutments are not to be removed and are incorporated into the design of the new bridge. The bridge superstructure, steel and concrete piers and footings are to be removed. Existing steel piles that interfere with the driving of the CISS piles shall be removed. Existing steel piles that do not interfere with the driving of the CISS piles shall be cut off 8 feet below the surrounding streambed elevation.

Removed materials that are not to be salvaged or used in the reconstruction shall become the property of the Contractor and shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

The Contractor shall not allow bridge removal materials to fall into the water of the Carmel River.

The Contractor shall submit a complete “Bridge Removal Plan” to the Engineer, detailing procedures, sequences, and all features required to perform the removal in a safe and controlled manner.

The Bridge Removal Plan shall include, but not be limited to the following:

A. The removal sequence, including staging of removal operations.
B. Equipment locations on the structure during removal operations.
C. Temporary support shoring or temporary bracing.
D. Locations where work is to be performed over moving river water or utilities.
E. Details, locations, and types of protective covers to be used.
F. Measures to assure that people, property, utilities, and improvements will not be
endangered.

G. Details and measures for preventing material, equipment, and debris from falling into the Carmel River including any portion of the dry channel between abutments.

The Contractor shall submit working drawings, with design calculations, to the Engineer for the proposed Bridge Removal Plan. The Bridge Removal Plan shall be prepared and signed by an engineer who is registered as a Civil Engineer in the State of California. The design calculations shall be adequate to demonstrate the stability of the structure during all stages of the removal operations. Calculations shall be provided for each stage of bridge removal and shall include dead and live load values assumed in the design of protective covers. At a minimum, a stage will be considered to be removal of the deck, the soffit, or the girders, in any span; or walls, bent caps, or columns at support locations.

Temporary support shoring, temporary bracing, and protective covers, as required, shall be designed and constructed in conformance with the provisions in Section 51-1.06, "Falsework," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

The assumed horizontal load to be resisted by the temporary support shoring and temporary bracing, for removal operations only, shall be the sum of the actual horizontal loads due to equipment, construction sequence or other causes, and an allowance for wind, but in no case shall the assumed horizontal load to be resisted in any direction be less than 5 percent of the total dead load of the structure to be removed.

The Bridge Removal Plan shall conform to the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The number of sets of drawings and design calculations shall be the same as specified for falsework working drawings in Section 51-1.06A, "Falsework Design and Drawings," of the Standard Specifications with Amendments issue date 11-30-10.

The time to be provided for the Engineer's review of the Bridge Removal Plan shall be five weeks.

The following additional requirements apply to the removal of portions of a bridge that is adjacent to a roadway that may be closed to public traffic for only brief periods of time:

A. The closure of roadways to public traffic shall conform to the provisions in Section 10-1.03 "Order of Work" and 10-2.06 "Maintaining Traffic" of these special provisions.

B. Prior to closing a roadway to traffic to accommodate bridge removal operations, the Contractor shall have all necessary workers, materials, and equipment at the site as needed to proceed with the removal work in an expeditious manner. While the roadway is closed to public traffic, work shall be pursued promptly and without interruption until the roadway is reopened to public traffic.

C. Bridge removal operations shall be performed during periods of time that the roadway is closed to public traffic except as specified herein for preliminary work.
D. Preliminary work shall be limited to operations that will not reduce the structural strength or stability of the bridge, or any element thereof, to a level that in the judgment of the Engineer would constitute a hazard to the public. This preliminary work shall also be limited to operations that cannot cause debris or any other material to affect the roadway. Protective covers may be used to perform preliminary work such as chipping or cutting the superstructure into segments, provided the covers are of sufficient strength to support all loads and are sufficiently tight to prevent dust and fine material from sifting down onto the riverbed. Protective covers shall extend at least 4 feet beyond the limit of the work underway.

E. Temporary support shoring and temporary bracing shall be used in conjunction with preliminary work when necessary to insure the stability of the bridge.

F. Temporary support shoring, temporary bracing and protective covers shall not encroach closer than 8 feet horizontally from the edge or 15 feet vertically above any traffic lane or shoulder that is open to public traffic.

G. During periods when the roadway is closed to public traffic, debris from bridge removal operations shall not be allowed to fall directly onto the river banks or into the river bed.

H. The removal operations shall be conducted in such a manner that the portion of the structure not yet removed remains in a stable condition at all times.

For bridge removal that requires the Contractor's registered engineer to prepare and sign the "Bridge Removal Plan", the Contractor's registered engineer shall be present at all times when bridge removal operations are in progress. The Contractor's registered engineer shall inspect the bridge removal operation and report in writing on a daily basis the progress of the operation and the status of the remaining structure. A copy of the daily report shall be available at the site of the work at all times. Should an unplanned event occur or the bridge operation deviate from the approved "Bridge Removal Plan", the Contractor's registered engineer shall submit immediately to the Engineer for approval, the procedure of operation proposed to correct or remedy the occurrence.

Payment for item of work "Bridge Removal" shall be as indicated in Section 15-4.03 "Payment" of the Standard Specifications.

**SECTION 10-3 - GRADING**

**10-3.01 CLEARING AND GRUBBING:**

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications and these Special Provisions.

Vegetation shall be cleared and grubbed only within the excavation and embankment slope and as required for construction of the bridge and construction access road for bridge construction.
At locations where there is no grading adjacent to a bridge or other structure, clearing and grubbing of vegetation shall be limited to 5 feet outside the physical limits of the bridge or structure.

Existing vegetation outside of the areas to be cleared and grubbed shall be protected from injury or damage resulting from the Contractor's operations.

Activities controlled by the Contractor, except cleanup or other required work, shall be confined within the graded areas of the roadway and established construction access road and adjacent area for construction access for bridge construction.

In addition to temporary fence (type ESA), the perimeter of the work site shall be adequately flagged to prevent damage to adjacent habitat.

Existing vegetation outside the areas to be cleared and grubbed shall be protected from injury or damage resulting from the Contractor's operations. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Precautions shall be taken to avoid other damage to vegetation by people or equipment.

No bulldozer/backhoe type equipment shall be used to remove vegetation unless specifically authorized by the Engineer with approval by the California Department of Fish and Game representative prior to removal.

Any trees or vegetation not planned for removal shall be provided appropriate protection from impact of construction activity.

Nothing herein shall be construed as relieving the Contractor of the Contractor's responsibility for final cleanup of the highway as provided in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

Measurement and Payment for clearing and grubbing including the removal and disposal of vegetative waste as specified herein shall be as indicated in Section 16-1.05 "Measurement" and Section 16-1.06 "Payment" of the Standard Specifications.

10-3.02 WATERING:

Watering shall conform to the provisions in Section 17, "Watering," of the Standard Specifications and these Special Provisions.

Full compensation for Watering and application of water shall be included in the Contract price paid for various contract items of work and no separate payment shall be made therefor.

Compensation for item of work "Develop Water Supply" shall be as indicated in Section 17-1.04 "Payment" of the Standard Specifications.

10-3.03 EARTHWORK:

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Surplus excavated material shall become the property of the Contractor and shall be disposed of
in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

Where a portion of the existing surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power-driven saw to a minimum depth of 0.17-foot before removing the surfacing. Full compensation for cutting the existing surfacing shall be considered as included in the contract price paid per cubic yard for roadway excavation and no additional compensation will be allowed therefor.

Reinforcement or metal attached to reinforced concrete rubble placed in embankments shall not protrude above the grading plane. Prior to placement within 2 feet below the grading plane of embankments, reinforcement or metal shall be trimmed to no greater than 3/4 inch from the face of reinforced concrete rubble. Full compensation for trimming reinforcement or metal shall be considered as included in the contract prices paid per cubic yard for the types of excavation shown in the Engineer's estimate, or the contract prices paid for furnishing and placing imported borrow or embankment material, as the case may be, and no additional compensation will be allowed therefor.

At the option of the Contractor, slurry cement backfill conforming to the provisions in Section 19-3.062, "Slurry Cement Backfill," of the Standard Specifications may be used as structure backfill for pipe culverts, including aluminum and aluminum coated pipe culverts.

Slopes at river channel and abutments shall be graded to contours as indicated on plan sheets for Abutment Grading Plan and Rock Slope Protection, profile and other plans. Material excavated from bridge approach embankments shall be measured and paid for as roadway excavation.

Slopes for roadway embankment shall be graded as indicated on cross sections and plans. Slope rounding shall not be required as provided in Section 19-2.05 of the Standard Specifications.

Measurement and Payment for roadway excavation shall be as indicated in Section 19-2.08 "Measurement" and Section 2.09 "Payment" of the Standard Specifications.

10-3.04 IMPORT BORROW:

The portion of imported borrow placed within 4 feet of the finished grade shall have a Resistance (R-Value) of not less than 20 (by Stabilometer, 300 psi exudation).

At the option of the Contractor, and to the extent that material from required excavation within the project limits is available, embankment shall be constructed of import borrow or of material obtained from required excavation within the project limits or a combination of borrow and material obtained from required excavation within the project limits.

Imported borrow shall be mineral material including rock, sand, gravel, or earth. The Contractor shall not use man-made refuse in imported borrow including:

A. Portland cement concrete
B. Asphalt concrete
C. Hot mix asphalt
D. Metal
E. Rubber
G. Mixed debris
H. Rubble

Import Borrow shall be as indicated in Section 19-7 “Borrow Excavation” and specifically Section 19-7.02 “Import Borrow” of the Standard Specifications.

Pervious backfill material placed within the limits of payment for bridges will be measured and paid for as structure backfill (bridge).

If structure excavation or structure backfill for bridges is not otherwise designated by type and payment for the structure excavation or structure backfill has not otherwise been provided for in the Standard Specifications or these special provisions, the structure excavation or structure backfill will be measured and paid for as structure excavation (bridge) or structure backfill (bridge), respectively.

Measurement for item of work “Import Borrow” shall be by the ton delivered and shall be as indicated in Section 19-7.04 “Measurement” of the Standard Specifications. Payment for item of work “Import Borrow” shall be as indicated in Section 19-7.05 “Payment” of the Standard Specifications.

10-3.05 STRUCTURAL EXCAVATION AND BACKFILL:

Structural Excavation and Structural Backfill shall be as indicated in Section 19-3 “Structural Excavation and Backfill” of the Standard Specifications and these Special Provisions.

Measurement of quantities for payment for Structural Excavation and Structural Backfill shall be determined from limits shown on Standard Plan A62C – Limits of Payment for Excavation and Backfill Bridge of the Standard Plans and Section 19-3.07 “Measurement” of the Standard Specifications. Payment for Structural Excavation and Structural Backfill shall be as indicated in Section 19-3.07 “Measurement” and Section 19-3.08 “Payment” of the Standard Specifications.

10-3.06 EROSION CONTROL (TYPE D):

Erosion control (Type D) includes applying erosion control materials to embankment and excavation slopes and other areas disturbed by construction activities. Erosion control (Type D) must comply with Section 20-3, "Erosion Control," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

If the slope on which the erosion control to be placed is finished during the rainy season as specified under "Water Pollution Control" of these special provisions, apply erosion control to the slope immediately.

Before applying erosion control materials, prepare soil surface under Section 19-2.05, "Slopes," of the Standard Specifications, except that rills and gullies exceeding 2 inches in depth or width must be leveled. Remove vegetative growth, temporary erosion control materials, and other debris from areas to receive erosion control.

10-3.06A MATERIALS:

Materials must comply with Section 20-2, "Materials," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.
Seed

Seed must comply with Section 20-2.10, "Seed," of the Standard Specifications with Amendments issue date 11-30-10. Seed not required to be labeled under the California Food and Agricultural Code shall be tested for purity and germination by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists. Measure and mix individual seed species in the presence of the Engineer.

Seed must contain at most 1.0 percent total weed seed by weight.

Deliver seed to the job site in unopened separate containers with the seed tag attached. Containers without a seed tag attached are not accepted. The Engineer takes a sample of approximately 1 ounce or 0.25 cup of seed for each seed lot greater than 2 pounds.

Seed must comply with the following:

**MIX #1 (UPLAND AREA)**

**NON-LEGUME SEED**

<table>
<thead>
<tr>
<th>Botanical Name (Common Name)</th>
<th>Percent Germination (Minimum)</th>
<th>Pounds Pure Live Seed Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elymus glaudus (Western ryegrass)</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>Bromus carinatus (California Brome)</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>Leymus triticoides (creeping wild rye)</td>
<td>40</td>
<td>6</td>
</tr>
</tbody>
</table>

**MIX #2 (WETLAND OR TRANSITIONAL AREAS)**

**NON-LEGUME-SEED**

<table>
<thead>
<tr>
<th>Botanical Name (Common Name)</th>
<th>Percent Germination (Minimum)</th>
<th>Pounds Pure Live Seed Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leymus tritifoloides (creeping wild rye)</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>Hordeum brachyantherum (meadow barley)</td>
<td>40</td>
<td>12.5</td>
</tr>
</tbody>
</table>

**Seed Sampling Supplies**

At the time of seed sampling, provide the Engineer a glassine lined bag and custody seal tag for each seed lot sample.

**Pre-plant Amendment**

The amendment shall be a mycorrhizal inoculum/soil enrichment, which contains hummus, humic acid, micronutrient and soil bacteria. The product shall be “Grolife”, “Tri C” or equal.

Commercial fertilizer shall conform to the provisions in Section 20-2.02, “Commercial Fertilizer,” of the Standard Specifications and shall have a guaranteed chemical analysis rate of 16-20 percent nitrogen, 10-12 percent phosphoric acid and 5-12 percent water soluble potash. The commercial fertilizer shall be Gro-Power Plus or equal.
Stabilizing Emulsion

Stabilizing emulsion must comply with Section 20-2.11, "Stabilizing Emulsion," of the Standard Specifications and these special provisions.

Stabilizing emulsion:

1. Must be in a dry powder form
2. Must be a processed organic adhesive used as a soil tackifier
3. May be reemulsifiable

10-3.06B APPLICATION:
Apply erosion control materials in separate applications in the following sequence:

1. Apply the following mixture with hydroseeding equipment at the rates indicated within 60 minutes after the seed has been added to the mixture:

<table>
<thead>
<tr>
<th>MIX #1 (UPLAND AREA)</th>
<th>Pounds Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Legume Seed</td>
<td>20</td>
</tr>
<tr>
<td>Pre-Plant Amendment</td>
<td>1000</td>
</tr>
<tr>
<td>(Gro-Life) or</td>
<td></td>
</tr>
<tr>
<td>(Tri-C)</td>
<td>400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MIX#2 (WETLAND OR TRANSITIONAL AREA)</th>
<th>Pounds Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Legume Seed</td>
<td>22</td>
</tr>
<tr>
<td>Pre-Plant Amendment</td>
<td></td>
</tr>
<tr>
<td>(Gro-Life) or</td>
<td>1000</td>
</tr>
<tr>
<td>(Tri-C)</td>
<td>400</td>
</tr>
</tbody>
</table>

2. The following mixture in the proportions indicated shall be applied with hydro-seeding equipment.

<table>
<thead>
<tr>
<th>Material</th>
<th>Cubic Yards Per Acre (Slope Measurement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>2000</td>
</tr>
<tr>
<td>Commercial Fertilizer (Gro-Power Plus)</td>
<td>1100</td>
</tr>
<tr>
<td>Stabilizing Emulsion (Solids)</td>
<td>150</td>
</tr>
</tbody>
</table>

The ratio of total water to total stabilizing emulsion in the mixture must be as recommended by the manufacturer.

The Engineer may change the rates of erosion control materials to meet field conditions.
10-3.06C MEASUREMENT AND PAYMENT:

Erosion control (Type D) will be measured by the square yard. The area will be calculated on the basis of actual or computed slope measurements.

The contract price paid per square yard for erosion control (Type D) includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying erosion control (Type D) complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-3.07 FINISHING ROADWAY:

Finishing roadway shall conform to the provisions in Section 22, "Finishing Roadway," of the Standard Specifications with Amendments issue date 11-30-10.

Measurement and Payment for item of work “Finishing Roadway” shall be as indicated in Section 22-1.02 “Measurement” and Section 22-1.03 “Payment” of the Standard Specifications with Amendments issue date 11-30-10.

10-3.08 HIGHWAY PLANTING:

The work performed in connection with highway planting shall conform to the provisions in Section 20-4, "Highway Planting," of the Standard Specifications and these special provisions

10-3.09 WILLOW CUTTINGS (PLANT GROUP W):

Willow cutting work shall consist of obtaining, transporting and planting willow cuttings in conformance with the provisions in Section 20-4, "Highway Planting," of the Standard Specifications with Amendments issue date 11-30-11 and these special provisions.

Willow cuttings shall not be planted before October 1st or after June 10 and not until the soil is moist to a minimum depth of 8 inches, unless otherwise permitted, in writing, by the Engineer.

Prior to planting, an area 2 feet in diameter shall be cleared of weed growth at each proposed plant (willow cutting) location. Pesticides shall not be used for weed control within the 2-foot diameter area.

The Contractor shall notify the Engineer, in writing, at least 10 working days prior to gathering willow cuttings. The cuttings shall be taken only from the areas shown on the plans or other adjacent areas designated by the Engineer.

Willow cuttings shall be taken at random from healthy, vigorous plants. No more than 50 percent of the plants in a designated area shall be cut. No more than 25 percent of each individual plant shall be cut. Cuts shall be made with sharp, clean tools.

Willow cuttings shall be reasonably straight, 20 inches to 24 inches in length, and 3/4 inch to 1-1/2 inch in diameter at the base of the cutting. The top of each willow cutting shall be cut square above a leaf bud, and the base of each willow cutting shall be cut below a leaf bud at an angle of approximately 45 degrees. Willow cuttings shall have leaves and branches trimmed off flush with the
stem. Pruned branches and trimmings shall be spread in the designated willow cutting areas so that no areas are left unsightly.

Willow cuttings shall be planted within 48 hours after cutting and shall be kept wet until planted. Willow cuttings not planted within 48 hours after cutting, or allowed to dry out, shall not be used. Willow cuttings not used shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications with Amendments issue date 11-30-10.

A root stimulant shall be applied to the willow cuttings immediately prior to planting. The stimulant shall be applied in conformance with the printed instructions of the root stimulant manufacturer. A copy of the instructions shall be furnished to the Engineer prior to applying the stimulant.

Planting holes shall be made perpendicular to the ground line and shall be formed with a steel bar or excavated by use of an auger, post hole digger or similar tools. Plant holes shall be large enough to receive the willow cuttings in order that the willow cuttings may be planted to the proper depths without damage to the bark. Where rock or other hard material prohibits holes from being excavated as specified, new holes shall be excavated and the abandoned holes backfilled.

If the soil in and around the plant hole is not wet prior to planting, the soil shall be watered and maintained in a wet state until the willow cuttings are planted.

Commercial fertilizer (packet) shall be slow or controlled release and shall be in a biodegradable packet form. The packet shall gradually release nutrients over a 12-month period. Each packet shall have a weight of 10 g ± 1 g and shall have the following guaranteed chemical analysis:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>20</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>10</td>
</tr>
<tr>
<td>Water Soluble</td>
<td>5</td>
</tr>
<tr>
<td>Potash</td>
<td></td>
</tr>
</tbody>
</table>

One commercial fertilizer packet shall be placed in the backfill of each plant to within 6 inches to 8 inches of the soil surface and approximately one inch from the cutting.

The base of willow cuttings shall be planted from 10 inches to 12 inches deep (approximately one-half the willow cutting's length) and shall have from 3 bud to 5 bud scars exposed above the plant hole. Cuttings with more than 5 bud scars exposed shall have excess scars removed by pruning. After planting, the plant holes shall be backfilled with excavated material. The excavated material shall be distributed evenly within the hole without clods, lumps or air pockets and compacted without damage to the willow cutting's bark. Compaction shall be adequate to prevent the willow cutting from being easily removed from the soil.

Cuttings shall be watered and maintained in a healthy condition from the time the cuttings are planted until acceptance of the contract. Cuttings that die shall be replaced at the Contractor's expense. The method of planting replacement cuttings shall be as specified in this section for willow cuttings.

The quantity of willow cuttings will be measured as units determined from actual count in place, excluding additional willow cuttings required for replacement cuttings.
Full compensation for obtaining and transporting willow cuttings, preparing planting holes, furnishing and placing commercial fertilizer packets, applying root stimulant, and for watering and maintaining willow cuttings prior to the continuance of the Plant Establishment Period beyond the acceptance of the construction project shall be considered as included in the contract unit price paid for plant (Group W) and no additional compensation will be allowed therefor.

**10-3.10 CYPRESS AND MONTEREY PINES (PLANT GROUP B):**

Cypress (Cypresus Macorcarpa) and Monterey Pines (Pinus Radiata) shall be supplied in 5 gallon pots and planted at locations as shown on the revegetation plan of the plans and in conformance with the provisions in Section 20-4, "Highway Planting," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

The Cypress and Monterey Pines shall not be planted before October 1st or after June 10 and not until the soil is moist to a minimum depth of 8 inches, unless otherwise permitted, in writing, by the Engineer.

Prior to planting, an area 2 feet in diameter shall be cleared of weed growth at each proposed plant location. Pesticides shall not be used for weed control within the 2-foot diameter area.

**10-3.10A PLANTING:**

Backfill material for plant holes shall be a mixture of soil and soil amendment. The quantity of soil amendment shall be as shown on the Plant List. Soil amendment shall conform to the provisions in Section 20-2.03, "Soil Amendment," of the Standard Specifications with Amendments issue date 11-30-10. Backfill material shall be thoroughly mixed and uniformly distributed throughout the entire depth of the plant hole without clods and lumps.

Measurement shall be by each plant supplied and planted

Full compensation for supplying, preparing planting holes, furnishing and placing commercial fertilizer packets, applying root stimulant, and for watering and maintaining Cypress and Monterey Pines during construction shall be considered as included in the contract unit price paid for Cypress and Monterey Pines (Plant Group B) and no additional compensation will be allowed therefor. The watering and maintenance of the plantings after the construction project has been accepted and before the end of the plant establishment period shall be compensated for by the item of work “Plant Establishment Work” and no additional compensation shall be allowed.

**10-3.11 PLANT ESTABLISHMENT WORK:**

The plant establishment work shall conform to the provisions in Section 20-4, “Highway Planting,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.

The plant establishment period will be Type 2 and shall be for a period of 5 years after the planting for Willow Cuttings (Plant Group W) and for Cypress and Monterey Pines (Plant Group B) and at the completion of the construction as determined by the Engineer.
Plant Establishment work as indicated is a requirement for the Schulte Road Bridge Project and maintenance of the project planting shall be as specified in the California Department of Fish and Game Streambed Alteration Agreement for the project.

The project site shall be maintained for five years following completion of construction to ensure a survival rate of at least 80 percent for replanted vegetation. If an 80 percent success rate is not realized at the end of five years, additional planting shall be required and maintenance shall be continued until the 80 percent success rate is achieved.

The Contractor shall supply all labor, materials, equipment and tools to establish and continually maintain all newly planted areas and street trees in accordance with the plans and Section 20-9, "Establishment and Maintenance Period," of the Standard Specifications with Amendments issue date 11-30-10. For the first two years, a minimum of monthly maintenance will be required. After the first two years, a minimum of quarterly maintenance will be required. The maintenance of the planted areas shall provide the required survival rate of 80% of number of plants shown on the plans at the end of the plant establishment period. A total of 5 years is required for the establishment and maintenance period.

The method of providing the necessary water for survival of the plants may be by temporary drip irrigation system, hand watering or any system that will maintain the 80% success rate for the plant establishment period. No overhead sprinklers will be allowed.

The County through its contracted environmental consultant will be responsible for all agency reporting.

If at any time during the plant establishment period it is determined by the Engineer that the survival rate of the planting as maintained by the Contractor is inadequate, the Contractor shall remedy the inadequate maintenance effort by replanting all dead plants and increasing the watering or other maintenance required to improve the survival rate of plantings to the satisfaction of the County.

Payment for maintenance of plantings during the plant establishment period after the construction contract has been accepted shall be by item of work "Plant Establishment Work" and no additional compensation shall be allowed therefor.

The contract unit price paid for "Plant Establishment Work" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in establishing and maintaining the street trees, streamside vegetation, and revegetation, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer. The cost for any additional visits necessary to maintain the site shall be included in the Lump Sum price for "Plant Establishment Work" and no additional compensation will be allowed therefor. The payment for Plant Establishment Work shall not be complete and the contractor shall not be relieved of continuing the work requirements until the full period of time and the 80% success of surviving planting as discussed in the Standard Specifications and these special provisions for plant establishment has been completed. This period shall continue beyond the period of all other required work items and after all other bridge and road items have been accepted. Plant Establishment Work shall have it’s own schedule of required work activities.
SECTION 10-4 SUBBASES AND BASES

10-4.01 AGGREGATE BASE:

Aggregate base must comply with Section 26, "Aggregate Bases," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Aggregate base must be Class 2.

Do not store reclaimed asphalt concrete or aggregate base with reclaimed asphalt concrete within 100 feet measured horizontally of any culvert, watercourse, or bridge.

Measurement and Payment for Aggregate Base shall be as indicated in Section 26-1.06 “Measurement” and Section 26-1.07 “Payment” of the Standard Specifications with Amendments issue date 11-30-10.

SECTION 10-5 SURFACINGS AND PAVEMENTS

10-5.01 HOT MIX ASPHALT:

This work includes producing and placing hot mix asphalt (Type A) using the Standard process.

Hot mix asphalt (Type A) shall conform to the provisions in Section 39, “Hot Mix Asphalt,” of the Standard Specifications dated May 2006 with Amendments issue date 11-30-10 and these Special Provisions.

The grade of asphalt binder to be mixed with aggregate for “Hot Mix Asphalt (Type A)” shall be PG 64-10 or as determined by the Engineer and shall conform to the provisions in Section 92, “Asphalts,” of the Standard Specifications dated May 2006 with Amendments issue date 11-30-10 and these Special Provisions.

The aggregate for HMA (Type A) must comply with the ¾ inch grading.

The asphalt content of the asphalt mixture will be determined in conformance with the requirements in California Test 382.

Measurement and Payment for “Hot Mix Asphalt (Type A)” shall be as indicated in Section 39-8 “Measurement and Payment” of the Standard Specifications with Amendments issue date 11-30-10.

10-5.02 PLACE ASPHALT CONCRETE DIKE:

“Place Asphalt Concrete Dike” shall conform to the provisions for Section 39-1.13 “Miscellaneous Areas and Dikes” and in Section 39, “Asphalt Concrete,” of the Standard Specifications with Amendments issue date 11-30-10 and these Special Provisions.
The amount of asphalt binder used in asphalt concrete placed in dikes, gutters, gutter flares, overside drains, and aprons at the ends of drainage structures shall be increased one percent by mass of the aggregate over the amount of asphalt binder determined for use in asphalt concrete placed on the traveled way.


Asphalt concrete dike shall be Type A, Type C or Type F at locations indicated on the plans. Details to construction of various dikes shall be as indicated on Drawing A87B of the Standard Plans.

Asphalt concrete supplied to be placed in “Place Asphalt Concrete Dike” will be paid for at the contract price per ton for “Asphalt Concrete” in conformance with the provisions in Section 39, “Asphalt Concrete,” of the Standard Specifications issue date 11-30-10. Payment for placing asphalt concrete in dikes will be in conformance with the provisions in Section 39-8.02, “Payment,” of the Standard Specifications with Amendments issue date 11-30-10.

SECTION 10-6 STRUCTURES

10-6.01 PILING:

10-6.01A GENERAL:

Piling shall conform to the provisions in Section 49, "Piling," of the Standard Specifications, and these special provisions.

Unless otherwise specified, welding of any work performed in conformance with the provisions in Section 49, "Piling," of the Standard Specifications, shall be in conformance with the requirements in AWS D1.1.

At the option of the Contractor, vibratory hammers, rotators, or oscillators may be used to install piles at Pier 2.

Attention is directed to “Welding” of these Special Provisions.

Difficult pile installation is anticipated due to the presence of cobbles and boulders, subsurface concrete debris, low overhead clearance, underground utilities, overhead utilities, the requirements of pile embedment into rock, sound control, vibration monitoring and traffic control.

When a calculated nominal driving resistance is shown on the plans for piling, that value shall be utilized in lieu of nominal resistance in Section 49,"Piling," of the Standard Specifications.

10-6.01B DRIVING SYSTEM SUBMITTAL:

Diesel fuel exhaust or leaks will not be allowed within the river channel. Before installing driven piling, the Contractor shall provide a driving system submittal, including drivability analysis, in conformance with the provisions in Section 5-1.02, “Plans and Working Drawings,” of the Standard Specifications. A submittal shall be made for each control location shown in the following table. All
proposed driving systems (i.e. each hammer that may be brought onto the site) shall be included in the submittal.

<table>
<thead>
<tr>
<th>Bridge Number</th>
<th>Control Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>44C0115 (501)</td>
<td>Abutment 1</td>
</tr>
<tr>
<td>44C0115 (501)</td>
<td>Pier 2</td>
</tr>
<tr>
<td>44C0115 (501)</td>
<td>Abutment 3</td>
</tr>
</tbody>
</table>

The driving system submittal shall include an analysis showing that the proposed driving systems will install piling to the specified tip elevation and specified bearing. Driving systems shall generate sufficient energy to drive the piles with stresses not more than 95 percent of the specified yield strength of the steel pile or unfilled steel shell. Submittals shall include the following:

A. Complete description of soil parameters used, including soil quake and damping coefficients, skin friction distribution, ratio of shaft resistance to nominal compression resistance, assumptions made regarding the formation of soil plugs, and assumptions made regarding drilling through the center of open ended steel shells.

B. List of all hammer operation parameters assumed in the analysis, including fuel settings, stroke limitations, and hammer efficiency.

C. Driveability studies that are based on a wave equation analysis using a computer program that has been approved by the Engineer. Driveability studies shall model the Contractor’s proposed driving systems, including the hammers, capblocks, and pile cushions, as well as determine driving resistance and pile stresses for assumed site conditions. Separate analyses shall be completed at elevations above the specified tip elevations where difficult driving is anticipated. Studies shall include plots for a range of pile compression capacities above and below the nominal compression resistance shown on the plans. Plots shall include the following:
   1. Pile compressive stress versus blows per foot.
   2. Pile tensile stress versus blows per foot.
   3. Nominal compression resistance versus blows per foot.

   When the drivability analysis hammers indicate that steel shell penetration rates are less than one foot per 200 blows and the driving stresses will exceed 80 percent of the specified yield strength of the steel shell, the study shall include assumptions for drilling through the center of open ended pipe piles and steel shells.

D. Copies of all test results from any previous pile load tests, dynamic monitoring, and all driving records used in the analysis.

E. Completed “Pile and Driving Data Form,” which is shown in these Special Provisions.

The driving system submitted shall be stamped and signed by an engineer who is registered as a Civil Engineer in the State of California. Before installing piling, the Contractor shall allow the Engineer 3 weeks to review a driving system submittal after a complete set, as determined by the Engineer, has been received. Should the Engineer fail to complete the review within the time allowance, and if, in the opinion of the Engineer, the Contractor’s controlling operation is delayed or interfered with by reason of the delay in the driving system submittal review, the delay shall be considered a right of way delay in conformance with the provisions in Section 8-1.09, “Right of Way Delays” of the Standard
Specifications.

The Contractor shall use the driving system and installation methods described in the approved driving system submittal for a given control location. Any change in hammers from those submitted and approved by the Engineer shall also meet the requirements for driving system submittals. Revised and new driving system submittals shall be approved by the Engineer prior to using corresponding driving systems on production piling. The Contractor shall allow the Engineer 3 weeks to review each revised and each new driving system submittal after a complete set, as determined by the Engineer, has been received.

Approval of pile driving equipment shall not relieve the Contractor of his responsibility to drive piling, free of damage, to the specified penetration.

Full compensation for driving system submittals shall be considered as included in the contract unit price paid for drive pile, and no additional compensation shall be allowed therefore.
CALIFORNIA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION LABORATORY

PILE AND DRIVING DATA FORM

Structure Name: ___________________ Contract No.: ___________________
Project: ___________________
Structure No.: ___________________ Pile Driving Contractor or Subcontractor: ___________________
Dist./Co./Rte./Post Mi: ___________________ (Pile Driven By)

Manufacturer: ___________________ Model: ___________________
Type: ___________________ Serial No.: ___________________
Rated Energy: ____________ at ____________ Length of Stroke

Modifications:
________________________________________________________
________________________________________________________
________________________________________________________

Material: ___________________
Thickness: ____________ in Area: ____________ in²
Modulus of Elasticity - E: ______________ ksi
Coefficient of Restitution - e:

Material: ___________________
Thickness: ____________ in Area: ____________ in²
Modulus of Elasticity - E: ______________ ksi
Coefficient of Restitution - e:

Helmet
Bonnet
Anvil Block
Drivehead

Weight: ____________ kips

Material: ___________________
Thickness: ____________ in Area: ____________ in²
Modulus of Elasticity - E: ______________ ksi
Coefficient of Restitution - e:

Pile Type:
Length (In Feet): ____________ ft
Lb/ft.: ____________ Taper: ____________
Wall Thickness: ____________ in
Cross Sectional Area: ____________ in²
Design Pile Capacity: ____________ kips
Description of Splice: ___________________

Tip Treatment
Description: ___________________

Note: If mandrel is used to drive the pile, attach separate manufacturer's detail sheet(s) including weight and dimensions.

Submitted By: ___________________
Date: ____________ Phone No.: ____________

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☐ Translab, Foundation Testing
☐ Translab, Geotechnical Design
☐ Resident Engineer

10-6.01C JETTING:
Book One 8/19/2011
Schulte Road Bridge
Project No. 382065

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Jetting to obtain the specified penetration in conformance with the provisions in Section 49-1.05, "Driving Equipment," of the Standard Specifications shall not be used for driven type piles.

10-6.01D DRILLING:

Drilling to obtain the specified penetration in conformance with the provisions in Section 49-1.05, “Driving Equipment,” of the Standard Specifications shall not be used for driven type piles. In addition to conforming to the provisions in Section 49-1.05, “Driving Equipment,” of the Standard Specifications, should obstructions to driving be encountered, the Contractor shall provide special driving tips or take other measures to prevent damage to the pile during driving. Full compensation for providing special tips or employing other measures to prevent damage to the piles shall be considered as included in the contract price paid per unit for Drive Steel Pile of the type and size shown on the plans, and no additional compensation will be allowed therefore.

10-6.01E DYNAMIC MONITORING:

Driven piles will be monitored during the final 25 feet of driving for dynamic response to the driving equipment. Monitoring will be done by Contractor forces using Contractor furnished dynamic pile analyzer monitoring instruments. These provisions do not apply to the dynamic monitoring of falsework piles by the Contractor.

The Engineer will determine which piles will receive dynamic monitoring from each control location. Piles to be dynamically monitored shall be made available to the State forces 2 business days prior to driving. The piles shall be safely supported a minimum of 6 inches off the ground in a horizontal position on at least 2 support blocks. The pile shall be positioned so that Contractor forces have safe access to the entire pile length and circumference for the installation of anchorages and control marks for monitoring. The Contractor shall rotate the piles on the blocks as directed by the Engineer.

Piles to be dynamically monitored shall be prepared and driven in the following sequence:

A. Prior to driving, the Contractor shall rotate and align the pile in the driving leads as directed by the Engineer.

B. The Contractor shall temporarily suspend driving operations when the pile tip is 25 feet above the elevation to which the tip is required to be finally driven.

C. During the suspension, the Contractor shall bolt the one pound instrument package securely to plugs or expansion anchors previously installed in the pile by the Contractor. The Contractor shall connect electrical cables to the instrument package as directed by the Engineer.

D. Driving operations shall resume as directed by the Engineer. Driving operations shall be suspended approximately one foot above the required tip elevation, as directed by the Engineer.

E. The Contractor shall remove the cables and instrument package from the pile.

F. The following business day, the Contractor shall install the instrument package on the pile and attach the cables and resume driving the pile to the required tip elevation, as directed by the Engineer.
G. The Contractor shall remove the cables and instruments from the monitored pile.

The Contractor shall be responsible for damage to the cables and instruments.

10-6.01F WAVE EQUATION:

The second paragraph of Section 49-1.03, "Determination of Length," and the third paragraph of Section 49-1.08, "Pile Driving Acceptance Criteria," of the Standard Specifications shall not apply to the pile types at the control locations shown on the plans. The Contractor's engineer shall conduct a penetration and bearing analysis in conjunction with dynamic monitoring of the piles at these locations and develop bearing acceptance criteria curves for these piles. Penetration and bearing analyses will be based on a wave equation analysis. The Contractor's engineer shall prepare a Pile Report summarizing the dynamic monitoring with revised specified tip elevations and the bearing acceptance criteria curves for each control location.

The Engineer shall be allowed 10 days to review the Pile Report containing dynamic monitoring, revised specified tip elevations, and bearing acceptance criteria curves for a given control location.

Should the Engineer fail to complete his review within the time specified and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Production piles, shall not be installed until the bearing acceptance criteria curves for piles within the corresponding control location has been approved by the Engineer.

The Engineer will require not more than seven (7) working days to perform pile load tests at each test location.

10-6.02 OPEN ENDED CAST-IN-STEEL-SHELL CONCRETE PILING:

Cast-in-steel-shell concrete piling shall consist of driven open-ended steel shells filled with reinforced cast-in-place concrete and shall conform to the details shown on the plans and to the provisions in Section 49-4, "Cast-in-Place Concrete Piles," of the Standard Specifications and these special provisions.

In addition to driving, it is anticipated that drilling through the center of open ended steel shells to obtain the specified penetration may be necessary. The diameter of the drilled hole shall be less than the inside diameter of the shell. Equipment or methods used for drilling holes shall not cause quick soil conditions or cause scouring or caving of the hole. Drilling shall not be used below the tip of the shell. Drilling shall not be used within 15 feet of the specified tip elevation.

The piles shall be installed open ended and no internal plates shall be used.

The Contractor shall submit to the Engineer for approval, a cleanout method for open-ended cast-in-steel-shell concrete piling. Care shall be taken during cleaning out of open-ended steel shells to prevent disturbing the foundation material surrounding the pile. The bottom 15 feet of the pile shall not be cleaned out. Equipment or methods used for cleaning out steel shells shall not cause quick soil conditions or cause scouring or caving around or below the piles. Open-ended steel shells shall be free
of any soil, rock, or other material deleterious to the bond between concrete and steel before placing reinforcement and concrete.

After the steel shell has been cleaned out, the steel shell shall be sealed expeditiously in order to prevent deterioration of the surrounding foundation material from the presence of water in conformance with the provisions of Section 51-1.10, "Concrete Deposited Under Water," of the Standard Specifications. Deteriorated foundation materials, including materials that have softened, swollen, or degraded, before the shell is sealed, shall be removed from the bottom of the steel shells and shall be disposed of. The sealed shell shall then be dewatered and cleaned out as specified herein.

Material resulting from cleaning out the steel shells shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications, unless otherwise specified or permitted by the Engineer.

Reinforcement shall be placed and secured symmetrically about the axis of the pile and shall be securely blocked to clear the sides of the steel shell.

10-6.03 STEEL PIPE PILING:

10-6.03A GENERAL:

Summary
Steel pipe piling shall consist of filled steel shells for open-ended cast-in-steel-shell concrete piling. Steel pipe piling shall conform to the provisions in Section 49-5, "Steel Piles," of the Standard Specifications and these special provisions.
Steel pipe piling at Pier 2 shall be designated as Class N steel pipe piling.

Submittals
Steel pipe piling qualification audits shall be submitted in conformance with the provisions in "Steel Pipe Piling Qualification Audit" of these special provisions.

A Certificate of Compliance demonstrating material traceability shall be furnished in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications, and the following:

A. The facility's authorized Quality Control Representative shall sign the Certificate of Compliance. The Quality Control Representative shall be on record with the Caltrans Office of Structural Materials.
B. The Certificate of Compliance shall include a statement that all materials and workmanship incorporated in the work and all required tests and inspections of this work have been performed in conformance with the details shown on the plans and these special provisions.
C. The Certificate of Compliance shall be accompanied by a certified mill test report (MTR) for each heat number of steel pipe piles being furnished.
D. The MTR or the Certificate of Compliance shall include the carbon equivalency calculated as $CE = C + (Mn+Si)/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15$. The carbon equivalency shall be 0.45% maximum.
Requests for inspection shall be submitted on the TL-38 Inspection Request form at least 10 days before any welding of Class N steel pipe piling. The form is available at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/smbforms.htm

Before attaching handling devices to steel pipe piling, the Contractor shall submit a plan to the Engineer that includes the locations, handling and fitting device details, and connection details. Attachments shall not be made to steel pipe piling until the plan is approved in writing by the Engineer. The Contractor shall allow the Engineer 7 days for the review of the plan.

10-6.03B MATERIALS:

General

The provisions of "Welding Quality Control" of these special provisions shall not apply to longitudinal and spiral seam welds in steel pipe piling.

The joining of pipe sections by utilizing a circumferential or skelp end weld shall conform to the requirements in AWS D1.1, the provisions of "Field Welding" specified herein, and these special provisions.

For the purposes of welding and prequalification of base metal, steel pipe piling designated as ASTM A 252 shall be treated as ASTM A 572, Grade 50, or ASTM A 709, Grade 50, in conformance with the requirements in AWS D1.1, Table 3.1.

Steel pipe piling shall be capable of meeting the fit-up requirements of AWS D1.1, Section 5.22.3.1, "Girth Weld Alignment (Tubular)," when the material is spliced utilizing a girth weld.

Butt welded seams subsequently formed, including skelp end welds, shall be 100 percent ultrasonically tested in the final formed and welded condition. The acceptance and repair criteria shall be in conformance with the requirements of API 5L, or AWS D1.1 for cyclically loaded nontubular connections.

Except for tack welding, gas metal arc welding (GMAW) shall not be used for the welding of steel pipe piling. When GMAW is used for tacking, the electrode shall not be deposited by short circuiting transfer.

The dimensional tolerances of steel pipe piling shall conform to the following:

A. Outside dimensions: ± 0.75% of the nominal size
B. Wall thickness: +10%, -5% of the nominal wall specified
C. Straightness: ± 1.0% over the length of the pipe

Class N Steel Pipe Piling

Class N steel pipe piling shall conform to either:
A. Manufactured, welded, tested, and inspected in conformance with the requirements in API 5L, Grade X52, PSL1, and the following:

1. Steel pipe piling shall be manufactured by a facility licensed to apply the API monogram.
2. Each length of steel pipe piling shall be marked with the API monogram in conformance with API 5L.

B. Welded in conformance with the requirements in AWS D1.1, and the following:

1. Groove welds using submerged arc welding from both sides without backgouging do not require a procedure qualification record.
2. At the beginning of fabrication, 3 representative macroetch samples for each thickness to be furnished shall be removed in the presence of the Engineer and will be inspected to verify complete penetration. Samples shall indicate that the weld is free of cracks and has thorough fusion between adjacent layers of weld metal and between weld metal and base metal. Undercut shall not exceed 1/32-inch.
3. Twenty-five percent of each groove weld shall receive NDT by either radiographic or ultrasonic methods that are in conformance with the requirements of AWS D1.1. The acceptance and repair criteria for ultrasonic testing (UT) shall conform to the requirements in AWS D1.1, Section 6, Table 6.3, for cyclically loaded nontubular connections subject to tension. The acceptance and repair criteria for radiographic testing (RT) shall conform to the requirements of AWS D1.1, Table 6.4, for tension stress welds in nontubular connections.

10-6.03C CONSTRUCTION:

General

Steel pipe pile may be re-tapped to prevent pile set-up provided the field welded splice remains at least three feet one meter above the work platform until that splice is approved in writing by the Engineer.

Handling devices may be attached to steel pipe piling. Welds attaching these devices shall be aligned parallel to the axis of the pile and shall conform to the requirements for field welding specified herein. Permanent bolted connections shall be corrosion resistant.

Field Welding

Field welding of steel pipe piling is defined as welding performed after the Certificate of Compliance has been furnished by the manufacturer or fabricator, and shall conform to the following requirements:

A. Welds made in the horizontal position, where the longitudinal pipe axis is vertical, shall be single-bevel groove welds. Joint fit-ups shall conform to the requirements in AWS D1.1, Section 5.22.3.1, "Girth Weld Alignment (Tubular)."
B. Backing rings shall conform to the following:
1. The minimum thickness shall be 1/4 inch and the backing ring shall be continuous.
2. Splices in the backing ring shall be made by complete penetration welds. These welds shall be completed, including visual inspection and any required nondestructive testing (NDT), before final insertion into a pipe end.
3. The attachment of backing rings to pipe ends shall be done using the minimum size and spacing of tack welds that will securely hold the backing ring in place. Tack welding shall be done in the root area of the weld splice. Cracked tack welds shall be removed and replaced before subsequent weld passes.
4. The gap between the backing ring and the steel pipe piling wall shall be no greater than 5/64 inch. One localized portion of the backing ring fit-up, that is equal to or less than a length that is 20 percent of the outside circumference of the pipe, as determined by the Engineer, may be offset by a gap equal to or less than 1/4 inch, provided that this localized portion is first seal welded using shielded metal arc E7016 or E7018 electrodes. The Contractor shall mark this localized portion so that it can be referenced during any required NDT.
5. Backing rings shall have sufficient width so that the backing ring will not interfere with the interpretation of the NDT.

C. For steel pipe with an outside diameter greater than 42 inches and with a wall thickness greater than one inch, the root opening tolerances may be increased to a maximum of 3/16 inch over the specified tolerances.

D. For welding limited to fit-up and attaching backing rings and handling devices, the preheat and interpass temperature shall be in conformance with the requirements in AWS D1.1, Section 3.5, "Minimum Preheat and Interpass Temperature Requirements," and with Table 3.2, Category C.

E. The minimum preheat and interpass temperature for splice welding and for making repairs shall be 150 °F, regardless of the pipe pile wall thickness or steel grade. In the event welding is disrupted, preheating to 150 °F must occur before welding is resumed.

F. Welds shall not be water quenched. Welds shall be allowed to cool unassisted to ambient temperature.

10-6.03D NONDESTRUCTIVE TESTING FOR STEEL PIPE PILING:

Class N steel pipe piling shall receive nondestructive testing (NDT) in conformance with these special provisions.

Nondestructive Testing of Welds made at a Permanent Facility

Nondestructive testing of welding performed in conformance with the requirements of API 5L shall conform to the following criteria:

A. The manufacturer shall provide to the Engineer a DVD recording of the actual product testing, when radiological testing is utilized, or the actual radiographic film when film radiography is utilized. This videocassette or film submittal shall be provided to the Engineer for review prior to shipment of the product from the manufacturing facility.

B. Ultrasonic testing of seam welds produced by the electric resistance welding process (ERW) shall comply with API 5L, SR17 utilizing a type V10 notch, N10 notch, or a 1/8 inch drilled hole.
C. The ultrasonic equipment shall utilize transducers oscillating at frequencies between 2 megahertz and 5 megahertz.

D. When the pipe ends of seam welds produced by the submerged arc welding process (SAW) are inspected by ultrasonic methods in accordance with API 5L Paragraph 9.8.5, the acceptance criteria shall be based on a type N5 notch or a 1/16 inch drilled hole.

E. When film radiography is utilized to inspect pipe ends or repairs, the transmitted film density shall be 2.0 to 4.0 in the area of interest (weld, base metal, and IQI).

F. Repaired defects shall be re-inspected utilizing the NDT method that originally detected the defect, except that film radiography may be utilized for inspection of repairs when the defect was originally detected utilizing real time imaging or radiological testing.

Nondestructive testing of welding performed in conformance with AWS D1.1 shall be in conformance with the following criteria:

A. Twenty-five percent of each longitudinal, circumferential, or spiral weld made at a permanent fabrication facility shall receive NDT. If repairs are required in a portion of the tested weld, the repaired portion shall receive NDT, and additional NDT shall be performed on untested portions of the weld. The additional NDT shall be made on both sides of the repair area for a length equal to 10 percent of the length of the pipe's outside circumference. After this additional 20 percent of NDT is performed, and if more repairs are required, the total cumulative repair lengths from all NDT shall be determined and documented. If the cumulative weld repair length is determined to be equal to or more than 10 percent of the length of the pipe outside circumference, then the entire weld shall receive NDT.

B. Circumferential or longitudinal welds shall receive NDT by either radiographic, real time imaging systems, or ultrasonic methods that are in conformance with the requirements in AWS D1.1.

C. The acceptance and repair criteria for ultrasonic testing (UT) shall conform to the requirements in AWS D1.1, Section 6, Table 6.3 for cyclically loaded nontubular connections. The acceptance and repair criteria for radiographic or real time image testing shall conform to the requirements of AWS D1.1 for tensile stress welds.

**Nondestructive Testing of Field Welds**

Nondestructive testing of field welds shall be in conformance with these special provisions.

Personnel performing ultrasonic testing (UT) for field welds will be required to verify their qualifications prior to performing nondestructive testing by both written and practical exams. Information regarding Ultrasonic Testing (UT) Qualification Program is available at:

[http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm](http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm)

At the option of the Contractor, either ultrasonic testing (UT) or radiographic testing (RT) shall be used as the method of NDT for splices made by field welding steel pipe piling. This NDT shall be
used for each field weld, including welds that are made onto a portion of the steel pipe piling that has been installed and any repair made to a splice weld. Testing shall be done at locations selected by the Engineer. The length of a splice weld, not including repairs, where NDT is to be performed, shall have a cumulative weld length that is equal to 25 percent of the pipe outside circumference. The Engineer may select several locations on a given splice for NDT. The cover pass shall be ground smooth at the locations to be tested. The acceptance and repair criteria for UT shall conform to the requirements in AWS D1.1, Section 6, Table 6.3 for cyclically loaded nontubular connections. The acceptance and repair criteria for radiographic or real time image testing shall conform to the requirements of AWS D1.1 for tensile stress welds. If repairs are required in a portion of the tested weld, the repaired portion shall receive NDT, and additional NDT shall be performed on untested portions of the weld. The additional NDT shall be made on both sides of the repair area for a length equal to 10 percent of the length of the pipe's outside circumference. After this additional 20 percent of NDT is performed, and if more repairs are required, the total cumulative repair lengths from all NDT shall be determined and documented. If the cumulative weld repair length is determined to be equal to or more than 10 percent of the length of the pipe outside circumference, then the entire weld shall receive NDT.

When backing rings are used, the backing ring complete joint penetration splice welds shall be inspected by RT or UT for material of thickness equal to or greater than 5/16 inch, or by RT for material of thickness less than 5/16 inch. The acceptance criteria for splice welds in backing rings shall be AWS D1.1, Section 6 and Figure 6.5 for RT, or Table 6.3 for UT.

10-6.03E STEEL PILES:

Steel piles shall conform to the provisions in Section 49-5, "Steel Piles," of the Standard Specifications.

10-6.03F MEASUREMENT AND PAYMENT (PILING):

Measurement and payment for the various types and classes of piles shall conform to the provisions in Sections 49-6.01, "Measurement," and 49-6.02, "Payment," of the Standard Specifications and these special provisions.

Payment for cast-in-place concrete piling shall conform to the provisions in Section 49-6.02, "Payment," of the Standard Specifications and these special provisions except that, when the diameter of cast-in-place concrete piling is shown on the plans as 24 inches or larger, reinforcement in the piling will be paid for by the pound as bar reinforcing steel (bridge).

Full compensation for cleaning out the open ended steel shells prior to installing reinforcement and filling with concrete, for disposing of materials removed from the inside of the pile, and for placing seal course concrete and dewatering the open-ended steel shells, as shown on the plans, as specified in these special provisions, and as directed by the Engineer, shall be considered as included in the contract unit price paid for drive pile, and no additional compensation will be allowed therefore.

Full compensation for conforming to the provisions in "Steel Pipe Piling" and "Nondestructive Testing" of these special provisions shall be considered as included in the contract prices paid for the various items of work involved, and no additional compensation will be allowed therefore.

Full compensation for redriving monitored piles, for dewatering during monitoring, for furnishing, installing and removing the instruments from the pile, and for preparing the Pile Report shall be considered as included in the contract unit price paid for drive pile, and no separate payment will be
made therefore. The length of piling to be paid for as furnish piling of the classes listed in the Engineer's Estimate shall include the lengths that monitored piles are redriven.

Full compensation for driving system submittals shall be considered as included in the contract unit price paid for drive pile, and no additional compensation will be allowed therefore.

10-6.04 PRESTRESSING CONCRETE:

Prestressing concrete shall conform to the provisions in Section 50, "Prestressing Concrete," of the Standard Specifications and these special provisions.

The number of working drawings to be submitted for initial review shall be 6 sets.

Payment for item of work "Prestressing Cast-In-Place Concrete" shall be as indicated in Section 50-1.11 "Payment" of the Standard Specifications.

10-6.05 CONCRETE STRUCTURES

Portland cement concrete structures shall conform to the provisions in Section 51, "Concrete Structures," of the Standard Specifications and these special provisions.

10-6.05A GENERAL:

Shotcrete shall not be used as an alternative construction method for reinforced concrete members unless otherwise specified.

Forms and supports used to support the deck of cast-in-place box girders shall be removed. The forming system employed shall leave no sharp projections into the cells.

10-6.05B DECK CRACK TREATMENT:

When methacylate resin work is to be conducted within 100 feet of a residence, business, or public space, the Contractor shall notify the school and the public at least 7 days before starting work and monitor airborne emissions during the work. Public notification and monitoring of airborne emissions shall conform to the following:

A. The Public Safety Plan required in Section 51-1.17A, "Deck Crack Treatment," of the Standard Specifications shall include a copy of the notification letter and a list of addresses and locations where the letter will be delivered and posted. The letter shall state the methacrylate resin work locations, dates, times, and what to expect. The letter shall be delivered to the school and to each residence and each business within 100 feet of the methacrylate resin work. The letter shall be delivered to local fire and police responders, and it shall be posted at the job site.

B. The Public Safety Plan shall include an Airborne Emissions Monitoring Plan prepared by a certified industrial hygienist and a copy of the hygienist's certification. Airborne emissions shall be monitored at a minimum of 4 points including the point of mixing, the point of application, and the point of nearest public contact, as determined by the Engineer. At the completion of methacrylate resin work, a report by the certified industrial hygienist with results of the Airborne Emissions Monitoring Plan shall be
submitted to the Engineer.

10-6.05C AGGREGATE GRADINGS:

The aggregate grading of concrete for Pier 2 Bent Cap shall be the one-inch maximum combined aggregate grading and shall conform to the requirements in Section 90-3, “Aggregate Gradings,” of the Standard Specifications.

10-6.05D FALSEWORK:

Falsework shall conform to the provisions in Section 51, "Concrete Structures," of the Standard Specifications and these special provisions.

In addition to the provisions in Section 51-1.06A, “Falsework Design and Drawings,” of the Standard Specifications, the time to be provided for the Engineer’s review of the working drawings shall be five weeks.

The Contractor’s engineer who signs the falsework drawings shall also certify in writing that the falsework is constructed in conformance with the approved drawings and the contract specifications prior to placing concrete. This certification shall include performing any testing necessary to verify the ability of the falsework members to sustain the stresses required by the falsework design. The engineer who signs the drawings may designate a representative to perform this certification. The designated representative shall be qualified to perform this work and shall have at least 3 years of combined experience in falsework design or supervising falsework construction. The Contractor shall certify the experience of the designated representative in writing and provide supporting documentation demonstrating the required experience if requested by the Engineer.

Welding and Nondestructive Testing

Welding of steel members, except for previously welded splices and except for when fillet welds are used where load demands are less than or equal to 1,000 pounds per inch for each 1/8 inch of fillet weld, shall conform to AWS D1.1 or other recognized welding standard. The welding standard to be utilized shall be specified by the Contractor on the working drawings. Previously welded splices for falsework members are defined as splices made prior to the member being shipped to the project site.

Splices made by field welding of steel beams at the project site shall undergo nondestructive testing (NDT). At the option of the Contractor, either ultrasonic testing (UT) or radiographic testing (RT) shall be used as the method of NDT for each field weld and any repair made to a previously welded splice in a steel beam. Testing shall be performed at locations selected by the Contractor. The length of a splice weld where NDT is to be performed, shall be a cumulative weld length equal to 25 percent of the original splice weld length. The cover pass shall be ground smooth at the locations to be tested. The acceptance criteria shall conform to the requirements of AWS D1.1, Section 6, for cyclically loaded nontubular connections subject to tensile stress. If repairs are required in a portion of the weld, additional NDT shall be performed on the repaired sections. The NDT method chosen shall be used for an entire splice evaluation including any required repairs.

For all field welded splices, the Contractor shall furnish to the Engineer a letter of certification which certifies that all welding and NDT, including visual inspection, are in conformance with the specifications and the welding standard shown on the approved working drawings. This letter of
certification shall be signed by an engineer who is registered as a Civil Engineer in the State of California and shall be provided prior to placing any concrete for which the falsework is being erected to support.

For previously welded splices, the Contractor shall determine and perform all necessary testing and inspection required to certify the ability of the falsework members to sustain the stresses required by the falsework design. This welding certification shall (1) itemize the testing and inspection methods used, (2) include the tracking and identifying documents for previously welded members, (3) be signed by an engineer who is registered as a Civil Engineer in the State of California, (4) and shall be provided prior to erecting the members.

10-6.05E CLOSURE POURS:

Attention is directed to "Order of Work" of these special provisions.
End Diaphragm and Pier 2 Cap closure pours shall be supported by falsework. All End Diaphragm and Pier 2 Cap concrete, up to the Construction Joint, shall be placed and cured for at least three days before the deck closure pour concrete is placed. The Stage 2 Pier 2 Cap bottom steel (#11 to 14) shall be mechanically coupled to the Stage 1 Pier 2 Cap bottom steel before the first Stage 2 concrete is placed. The Stage 2 Pier 2 Cap top steel (#14 to 14) shall be mechanically coupled to the Stage 1 Pier 2 Cap top steel before the Stage 2 deck concrete is placed.

Where a soffit slab or deck closure pour is shown on the plans, reinforcement protruding into the closure space and forms for the closure pours, except as specified herein, shall conform to the following:

A. During the time of placement of Stage 2 concrete, reinforcing steel which protrudes into the closure space shall be completely free from any connection to the reinforcing steel, concrete, or other attachments of the adjacent structure, including forms except at the Pier 2 Cap. The reinforcing steel shall remain free of any connection for a period of not less than 24 hours following completion of the pour.

B. Forms for the soffit slab and deck slab closure pours shall be supported from the superstructure on both sides of the closure space at the End Diaphragms and the Pier 2 Cap.

10-6.05F MEASUREMENT AND PAYMENT:

Measurement and payment for concrete in structures shall conform to the provisions in Section 51-1.22, "Measurement," and Section 51-1.23, "Payment," of the Standard Specifications and these special provisions.

Full compensation for public notification and airborne monitoring for deck crack treatment shall be considered as included in the contract price paid per cubic yard for structural concrete, bridge, and no additional compensation will be allowed therefore.

10-6.06 SEALING JOINTS:

Joint between the concrete bridge deck and the concrete backwalls shall be sealed in conformance with the details shown on the plans, the provisions in Section 51, "Concrete Structures," of the Standard Specifications, and these special provisions.

Temporary seals shall be placed before a portion is opened to public traffic in each stage of
construction. After backwall concrete has been placed, all joints shall be covered with temporary steel plates or plywood sheets or protected by other means approved by the Engineer. Temporary seals will not be allowed as part of the final joint seal. Temporary seals shall be disposed of in conformance with the provisions in Section 7-1.13, “Disposal of Materials Outside of the Highway Right of Way,” of the Standard Specifications. Temporary seals will not be measured for payment.

Full compensation for temporary seals and protecting joints shall be considered as included in the contract price paid per cubic yard for structural concrete, bridge and no additional compensation will be allowed therefore.

When ordered by the Engineer, a joint seal larger than called for by the Movement Rating shown on the plans must be furnished and installed. Payment to the Contractor for furnishing the larger seal and for saw cutting the increment of additional depth of groove required will be determined as provided in Section 4-1.03, “Changes,” of the Standard Specifications.

10-6.07 REFINISHING BRIDGE DECKS:

Surfaces of bridge decks at the four one-inch diameter threaded rods per panel of temporary railing (Type K) that had been drilled and bonded to the deck to hold the temporary railing in place shall be prepared and refinished flush with the adjoining deck surface in conformance with these special provisions after the threaded rods have been removed.

The Contractor may refinish the deck surface using Portland cement concrete or rapid setting concrete.

The exact area to be refinished will be designated by the Engineer.

When work is being performed within 10 feet of a traffic lane, dust and residue from deck preparation and cleaning shall be removed or controlled by vacuum, water spray, or shield methods approved by the Engineer. Water, dust, residue, or slurry thereof shall not be allowed to fall from the bridge deck or cross a lane open to public traffic.

Concrete shall be removed without damage to concrete that is to remain in place. Damage to concrete that is to remain in place shall be repaired to a condition satisfactory to the Engineer.

The concrete in deck areas to be refinished shall be removed to a depth of approximately 3/4 inch below the adjoining deck surface. A 3/4-inch deep saw cut, or cored hole no less than 4-inches in diameter, shall be made along the perimeter of deck areas to be refinished before removing the concrete.

Concrete removal may be done by abrasive blast cutting, abrasive sawing, impact tool cutting, machine rotary abrading, or by other methods, all to be approved by the Engineer. Cut areas shall be cleaned free of dust and all other loose and deleterious materials by brooming, abrasive blast cleaning, and high pressure air jets. Equipment shall be fitted with suitable traps, filters, drip pans, or other devices to prevent oil or other deleterious matter from being deposited on the deck.

Existing reinforcement, exposed during the removal of concrete, that is to remain in place shall be protected from damage.

Threaded rods shall be cut off 1 inch below the existing concrete deck surface or at the bottom of
concrete removal, whichever is lower.

Where refinishing is not required, threaded rods shall be cut off 1 inch below the finished surface and the holes shall be patched with rapid setting concrete.

Refinishing isolated high areas in the existing deck may be accomplished by cutting the concrete down to be flush with the plane of the adjoining deck surface by abrasive sawing, grinding, impact tool cutting, or by other methods to be approved by the Engineer. When grinding is performed to bring the deck concrete flush with the adjoining deck surface, the resulting surface shall have a coefficient of friction of not less than 0.35 as determined by California Test 342.

10-6.07A PORTLAND CEMENT CONCRETE:

An epoxy adhesive shall be applied to the surfaces to be refinshed before placing the portland cement concrete. Immediately prior to applying the adhesive, the area to receive the adhesive shall be cleaned by abrasive blasting and blown clean by compressed air to remove dust and any other loose material. The area to be covered shall be surface dry and the substrate temperature shall be 40 °F or above when the adhesive is applied.

The epoxy adhesive shall be furnished and applied in conformance with the provisions in Section 95-1, "General," and Section 95-2.03, "Epoxy Resin Adhesive for Bonding New Concrete to Old Concrete," of the Standard Specifications. The exact rate of applying epoxy adhesive will be as determined by the Engineer. The adhesive shall be worked onto the surface with stiff brushes or equal.

Portland cement concrete used to fill the prepared areas shall conform to the provisions in Section 90, "Portland Cement Concrete," of the Standard Specifications and the following:

A. The concrete shall contain a minimum of 675 pounds of cementitious material per cubic yard.

B. The amount of free water used in concrete shall not exceed 280 pounds per cubic yard.

C. The aggregate shall contain between 50 and 55 percent fine aggregate and the remainder shall be pea gravel. The grading of pea gravel shall be such that 100 percent passes the 1/2-inch sieve and not more than 5 percent passes the No. 16 sieve, unless a larger size is ordered by the Engineer.

D. (BLANK)

E. Admixtures shall be furnished and used if directed by the Engineer.

F. Immediately after depositing on the newly placed adhesive, the portland cement concrete shall be thoroughly consolidated until all voids are filled and free mortar appears on the surface and then struck off to the required grade.

F. Concrete shall be cured as provided in Section 90-7.03, "Curing Structures," of the Standard Specifications.
G. No loads of any kind shall be applied to the portland cement concrete for at least 7 days after placing.

10-6.07B RAPID SETTING CONCRETE:

The concrete used to fill the prepared areas shall be a high-strength material consisting of magnesium phosphate concrete, modified high alumina based concrete, or portland cement based concrete. Magnesium phosphate concrete shall conform to the requirements for magnesium phosphate concrete in Section 83-2.02D(1), "General," of the Standard Specifications and these special provisions. Modified high alumina based concrete and portland cement based concrete shall be water activated and shall conform to the requirements for single component (water activated) magnesium phosphate concrete in Section 83-2.02D(1), "General," of the Standard Specifications.

A clean uniform rounded aggregate filler may be used to extend the rapid setting concrete. The moisture content of the aggregate shall not exceed 0.5 percent. Grading of the aggregate shall conform to the following:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percentage Passing</th>
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</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>100</td>
</tr>
<tr>
<td>No. 16</td>
<td>0-5</td>
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</tbody>
</table>

The amount of aggregate filler shall conform to the manufacturer's recommendation, but in no case shall the concrete strengths be less than that specified for magnesium phosphate concrete in Section 83-2.02D(1), "General," of the Standard Specifications.

Mixing of components of dual component (with a prepackaged liquid activator) magnesium phosphate shall be by complete units, supplied by the manufacturer. Portions of units shall not be used. Water shall not be added to dual component magnesium phosphate.

Immediately before applying the rapid setting concrete, the surface shall be dry and blown clean by compressed air to remove accumulated dust and any other loose material. If the surface becomes contaminated at any time before placing the concrete, the surface shall be cleaned by abrasive blasting. The surface temperature of the areas to be covered shall be 39 °F or above when the concrete is applied. Methods proposed to heat said surfaces are subject to approval by the Engineer. The surface for the magnesium phosphate concrete shall be dry. The surfaces for modified high alumina based concrete or portland cement based concrete may be damp but not saturated.

Magnesium phosphate concrete shall not be mixed in containers or worked with tools containing zinc, cadmium, aluminum, or copper. Modified high alumina based concrete shall not be mixed in containers or worked with tools containing aluminum.

Concrete shall not be retempered. Finishing tools that are cleaned with water shall be thoroughly dried before working the concrete.

When placing concrete on slopes exceeding 5 percent, the Engineer may require the Contractor to provide a flow controlled modified material.

Modified high alumina based concrete and portland cement based concrete shall be cured in

Unless otherwise permitted in writing by the Engineer, public traffic shall not be permitted on the new concrete until at least 24 hours after final set.

10-6.07C FINISHING REQUIREMENTS:

In advance of the curing operations, the surface of the concrete shall be textured by brooming with a stiff bristled broom or by other suitable devices that will result in uniform scoring. Brooming shall be performed transversely. The operation shall be performed at a time and in a manner that produces a hardened surface having a uniform texture and a coefficient of friction of not less than 0.35 as determined by California Test 342.

Refinished surfaces that are found to have a coefficient of friction less than 0.35 shall be ground or grooved by the Contractor at his expense in conformance with the applicable provisions in Section 42, "Groove and Grind Pavement," of the Standard Specifications. Retesting of ground or grooved surfaces for coefficient of friction of not less than 0.35 as determined by California Test 342 will be at the Contractor's expense.

In the longitudinal direction, refinished surfaces shall not vary more than 0.02 foot from the lower edge of a 12-foot straightedge. The refinished surface shall be flush with the existing adjoining surface.

10-6.07D MEASUREMENT AND PAYMENT:

Measurement and Payment for items of work “Structural Concrete, Bridge Footing” and “Structural Concrete, Bridge” shall be as indicated in Section 51-1.22 “Measurement” and Section 51-1.23 “Payment” of the Standard Specifications.

Refinish bridge deck will not be measured for payment.

Full compensation for refinish bridge deck shall be considered as included in the contract price paid per linear foot for “Temporary Railing (Type K)” and no separate payment will be made therefore.

10-6.08 ELASTOMERIC BEARING PADS:

Elastomeric bearing pads shall conform to the provisions in Section 51-1.12H, "Elastomeric Bearing Pads," of the Standard Specifications and these special provisions.

Payment of elastomeric bearing pads shall be considered as included in the contract prices paid for the various items of concrete work, and no additional compensation will be allowed therefore.

10-6.09 REINFORCEMENT:

Reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these special provisions.
The Department's mechanical splices prequalified list can be found at:

http://www.dot.ca.gov/hq/esc/approved_products_list/

The provisions in "Welding Quality Control" of these special provisions shall not apply to resistance butt welding.

At the option of the Contractor, sample splices for cast-in-steel-shell concrete piling hoops shall be either 1) removed from the completed lot, or 2) prepared in the same manner as specified in Section 52-1.08 “Splicing,” of the Standard Specifications for ultimate prequalification sample splices and control bars.

Measurement and Payment for reinforcement in structures shall conform to the provisions in Section 52-1.10, “Measurement,” and Section 52-1.11, “Payment,” of the Standard Specifications and these special provisions.

10-6.10 FURNISH SIGN:

Signs shall be fabricated and furnished in accordance with details shown on the plans, the Traffic Sign Specifications, and these special provisions.

Traffic Sign Specifications for California sign codes are available for review at:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm

Traffic Sign Specifications for signs referenced with Federal MUTCD sign codes can be found in Standard Highway Signs Book, administered by the Federal Highway Administration, which is available for review at:


Information on cross-referencing California sign codes with the Federal MUTCD sign codes is available at:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm

Temporary or permanent signs shall be free from blemishes that may affect the serviceability and detract from the general sign color and appearance when viewing during daytime and nighttime from a distance of 25 feet. The face of each finished sign shall be uniform, flat, smooth, and free of defects, scratches, wrinkles, gel, hard spots, streaks, extrusion marks, and air bubbles. The front, back, and edges of the sign panels shall be free of router chatter marks, burns, sharp edges, loose rivets, delaminated skins, excessive adhesive over spray and aluminum marks.

10-6.10A QUALITY CONTROL FOR SIGNS:

The requirements of "Quality Control for Signs" in this section shall not apply to construction area signs.
No later than 14 days before sign fabrication, the Contractor shall submit a written copy of the quality control plan for signs to the Engineer for review. The Engineer will have 10 days to review the quality control plan. Sign fabrication shall not begin until the Engineer approves the Contractor's quality control plan in writing. The Contractor shall submit to the Engineer at least 3 copies of the approved quality control plan. The quality control plan shall include, but not be limited to the following requirements:

A. Identification of the party responsible for quality control of signs,

B. Basis of acceptance for incoming raw materials at the fabrication facility,

C. Type, method and frequency of quality control testing at the fabrication facility,

D. List (by manufacturer and product name) of process colors, protective overlay film, retroreflective sheeting and black non-reflective film,

E. Recommended cleaning procedure for each product, and

F. Method of packaging, transport and storage for signs.

No legend shall be installed at the project site. Legend shall include letters, numerals, tildes, bars, arrows, route shields, symbols, logos, borders, artwork, and miscellaneous characters. The style, font, size, and spacing of the legend shall conform to the Standard Alphabets published in the FHWA Standard Highway Signs Book. The legend shall be oriented in the same direction in accordance with the manufacturer's orientation marks found on the retroreflective sheeting.

On multiple panel signs, legend shall be placed across joints without affecting the size, shape, spacing, and appearance of the legend. Background and legend shall be wrapped around interior edges of formed panel signs as shown on plans to prevent delamination.

The following notation shall be placed on the lower right side of the back of each sign where the notation will not be blocked by the sign post or frame:

A. PROPERTY OF MONTEREY COUNTY,
B. Name of the sign manufacturer,
C. Month and year of fabrication,
D. Type of retroreflective sheeting, and
E. Manufacturer's identification and lot number of retroreflective sheeting.

The above notation shall be applied directly to the aluminum sign panels in 1/4-inch upper case letters and numerals by die-stamp and applied by similar method to the fiberglass reinforced plastic signs. Painting, screening, or engraving the notation will not be allowed. The notation shall be applied without damaging the finish of the sign.

Signs with a protective overlay film shall be marked with a dot of 3/8 inch in diameter. The dot placed on white border shall be black, while the dot placed on black border shall be white. The dot shall be placed on the lower border of the sign before application of the protective overlay film and shall not
be placed over the legend and bolt holes. The application method and exact location of the dot shall be determined by the manufacturer of the signs.

For sign panels that have a minor dimension of 48 inches or less, no splice will be allowed in the retroreflective sheet except for the splice produced during the manufacturing of the retroreflective sheeting. For sign panels that have a minor dimension greater than 48 inches, only one horizontal splice will be allowed in the retroreflective sheeting.

Unless specified by the manufacturer of the retroreflective sheeting, splices in retroreflective sheeting shall overlap by a minimum of one inch. Splices shall not be placed within 2 inches from edges of the panels. Except at the horizontal borders, the splices shall overlap in the direction from top to bottom of the sign to prevent moisture penetration. The retroreflective sheeting at the overlap shall not exhibit a color difference under the incident and reflected light.

Signs exhibiting a significant color difference between daytime and nighttime shall be replaced immediately.

Repairing sign panels will not be allowed except when approved by the Engineer.

The Department will inspect signs at the Contractor's facility and delivery location, and in accordance with Section 6, "Control of Materials," of the Standard Specifications. The Engineer will inspect signs for damage and defects before and after installation.

Regardless of kind, size, type, or whether delivered by the Contractor or by a common carrier, signs shall be protected by thorough wrapping, tarping, or other methods to ensure that signs are not damaged by weather conditions and during transit. Signs shall be dry during transit and shipped on palettes, in crates, or tier racks. Padding and protective materials shall be placed between signs as appropriate. Finished sign panels shall be transported and stored by method that protects the face of signs from damage. The Contractor shall replace wet, damaged, and defective signs.

Signs shall be stored in dry environment at all times. Signs shall not rest directly on the ground or become wet during storage. Signs, whether stored indoor or outdoor, shall be free standing. In areas of high heat and humidity signs shall be stored in enclosed climate-controlled trailers or containers. Signs shall be stored indoor if duration of the storage will exceed 30 days.

Screen processed signs shall be protected, transported and stored as recommended by the manufacturer of the retroreflective sheeting.

When requested, the Contractor shall provide the Engineer test samples of signs and materials used at various stages of production. Sign samples shall be 12" x 12" in size with applied background, letter or numeral, and border strip.

The Contractor shall assume the costs and responsibilities resulting from the use of patented materials, equipment, devices, and processes for the Contractor's work.
SECTION 10-7 DRAINAGE FACILITIES

10-7.01 REINFORCED CONCRETE PIPE:

Reinforced concrete pipe shall conform to the provisions in Section 65, "Reinforced Concrete Pipe," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Where embankment will not be placed over the top of the pipe, a relative compaction of not less than 85 percent shall be required below the pipe spring line for pipe installed using Method 1 backfill in trench, as shown on Standard Plan A62D. Where the pipe is to be placed under the traveled way, a relative compaction of not less than 90 percent shall be required unless the minimum distance between the top of the pipe and the pavement surface is the greater of 4 feet or one half of the outside diameter of the pipe.

Except as otherwise designated by classification on the plans or in the specifications, joints for culvert and drainage pipes shall conform to the plans or specifications for standard joints.

When reinforced concrete pipe is installed in conformance with the details shown on Standard Plan A62DA, the fifth paragraph of Section 19-3.04, "Water Control and Foundation Treatment," of the Standard Specifications shall not apply.

When solid rock or other unyielding material is encountered at the planned elevation of the bottom of the bedding, the material below the bottom of the bedding shall be removed to a depth of 1/50 of the height of the embankment over the top of the culvert, but not less than 6 inches nor more than 12 inches. The resulting trench below the bottom of the bedding shall be backfilled with structure backfill material in conformance with the provisions in Section 19-3.06, "Structure Backfill," of the Standard Specifications with Amendments issue date 11-30-10.

The excavation and backfill below the planned elevation of the bottom of the bedding will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications with Amendments issue date 11-30-10.

The Outer Bedding shown on Standard Plan A62DA shall not be compacted prior to placement of the pipe.

Measurement and Payment for Reinforced Concrete pipe shall be as indicated in Section 65-1.09 "Measurement" and Section 65-1.10 "Payment" of the Standard Specifications with Amendments issue date 11-30-10.

10-7.02 MINOR CONCRETE STRUCTURES, DRAINAGE INLETS:

Concrete structures shall conform to Section 51, "Concrete Structures," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions

Drainage inlet type GDO with Grate Type 24-12X and CL CB 2’x4’ with 5” walls, shall conform to the provisions in Section 51-1.02, "Minor Structures," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.
Drainage inlets as shown on the plans shall be measured by each inlet location as shown on the plans and shall include type GDO with Grate Type 24-12X and CL CB 2’x4’ with 5” walls as a single unit. Payment for item of work “Drainage Inlet” shall be paid for at the contract price for item of work “Drainage Inlet”, which price shall include full compensation for all excavation, backfill, bar reinforcing steel, stops, metal frames and covers, metal frames and grates, unused pipe stubs, and pipe connections into the structures, including concrete collar as shown on the plans, and no additional compensation shall be allowed therefor. Minor structures, at the option of the Contractor, may be furnished and installed as precast units provided the structures in place are equal in all respects to cast-in-place construction as specified herein and as approved by the Engineer.

10-7.03 UTILITY LATERAL RELOCATION:

Water supply laterals, where directed by the Engineer or where existing laterals conflict with work shown on the plans, shall be adjusted to grade in conformance with the provisions in Section 15-2.05, “Reconstruction,” of the Standard Specifications with Amendments issue date 11-30-10, and as required by the respective utility that owns the affected lateral.

For the purpose of this contract, the term “conflict” when used in connection with this section shall mean that the existing utility lateral lies within 6 inches of a new underground pipe or structure to be constructed as part of this work.

Water supply laterals to be relocated shall be relocated horizontally and/or vertically, as directed by the Engineer and as required by the water company. Water supply laterals to be relocated shall use materials, fittings and other details of the relocation of the lateral and shall be in accordance with the standards and requirements of the water company.

Water laterals to be relocated shall be relocated concurrently with the impacted work being conducted by the Contractor. The California American Water Company (Cal Am Water) shall be contacted prior to work to coordinate the relocation of water line laterals.

Full compensation for water supply laterals that require relocation shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

10-7.04 WATER UTILITY RELOCATION:

Treated water and raw water mains that are owned by Cal Am Water Company will be relocated by the Contractor as indicated in the Utility Staging Plan plans.

The Contractor shall schedule work activities and cooperate with Cal Am Water to relocate the water mains as shown on the “Utility Staging Plans” of Sheets 14 through 17 of the plans. Cal Am Water has arranged with the County to provide for the water main relocations required from the existing bridge to the proposed bridge within the Construction Contract for the Schulte Road Bridge Replacement Project. The Details for the connections for the water main connections will be provided by Cal Am Water and shall be as specified by the Engineer.

The staging of the water main relocations and the duplication of lines is planned to provide for
continuous use of water mains during the relocation of the water mains from the existing bridge to the new bridge. The Contractor shall ensure that no aspect of the work shall interrupt or otherwise interfere with Cal Am’s operations. The Contractor shall ensure water service to Cal Am’s customers remains within the standards prescribed by California Public Utilities Commission General Order 103A.

The Contractor shall defend, indemnify and hold harmless the COUNTY and Cal Am, its officers, employees and agents from and against any and all claims or actions arising out of or related to the Contractor’s performance of the work shown on the plans and these Special Provisions, except to the extent such claims or actions are the result of the sole negligence of the COUNTY or Cal Am, its officers, employees or agents.

Compensation for water main relocation will be by contract item of “Water Utility Relocation” and shall be constructed as shown on the plans. The work and materials for relocation and construction of additional water mains as shown on the plans shall be paid for by the contract lump sum price for “Water Utility Relocation” and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing the water mains within utility casings in the bridge, within the approach roadways and associated valves, water meters and connections to existing and temporary water mains, complete in place, including excavation and backfill, replacing subbase, base, and pavement where water mains and conduits are installed through paved areas to be used by traffic, testing and checking the water mains, maintaining existing water utility operation, salvaging, relocating or removing existing water mains, as shown on the plans, as specified in these specifications and the Special Provisions, and as directed by the Engineer.

10-7.05 WELDED STEEL CASING (BRIDGE):

Welded steel pipe casings through bridges shall be of the sizes shown and shall conform to the provisions in Section 70, "Miscellaneous Facilities," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Unless otherwise shown on the project plans, casings shall be installed at each abutment, and casings shall be extended to the greater of: (1) 5 feet beyond the adjacent wingwall or (2) 20 feet beyond the abutment BB and EB lines shown on the plans.

10-7.05A WORKING DRAWINGS:

Working drawings for temporary support of casing pipe at the abutments shall be submitted for approval in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings" of the Standard Specifications.

10-7.05B MATERIALS:

Casing Pipe

Casing shall be welded steel pipe conforming to the provisions in Section 70-1.02B, "Welded Steel Pipe," of the Standard Specifications, except that the pipe shall be treated in accordance with the following requirements, prior to shipping. Exterior surfaces of welded steel pipe shall be cleaned and coated in conformance with the requirements in ANSI/AWWA C213 or at the option of the Contractor, cleaned, primed, and coated in accordance with specifications of ANSI/AWWA C214.
Pipe Wrapping Tape

Wrapping tapes for pipe in contact with the ground shall be a pressure sensitive polyvinyl chloride or polyethylene tape having thickness of 50 mils, minimum.

Concrete Pipe Supports

Concrete pipe supports, shown as utility cradles on the plans, shall consist of cast-in-place concrete pipe cradle, galvanized steel pipe clamp, 2 anchor bolts, and where shown on the plans, a stainless steel pipe protection shield.

Concrete pipe supports and pipe stops shall conform to the dimensions shown on the plans and shall be constructed minor concrete conforming to the provisions in Section 90-10, "Minor Concrete," of the Standard Specifications with Amendments issue date 11-30-10, commercial quality wire mesh and reinforcement. The concrete pipe supports and pipe stops shall be moist cured for not less than 3 days.

Epoxy Adhesive

Epoxy adhesive shall conform to the provisions in Section 95,"Epoxy" of the Standard Specifications and one of the following:

A. Section 95-2.01, “Binder (Adhesive), Epoxy Resin Base” for load bearing applications.
B. Section 95-2.04, “Rapid Set Epoxy Adhesive for Pavement Markers”
C. Section 95-2.05, “Standard Set Epoxy Adhesive for Pavement Markers”

10-7.05C CONSTRUCTION:

If a blockout is provided in the bridge abutment wall for casing pipe, the space between the casing pipe and bridge abutment wall shall be filled with mortar conforming to the provisions in Section 51-1.135, "Mortar," of the Standard Specifications.

Openings for utilities through bridge superstructure concrete shall either be formed or shall consist of pipe sleeves.

Wrapping and Coating Pipe

Damaged coating on steel casing in contact with earth shall be wrapped as follows:

A. Pipe to be wrapped shall be thoroughly cleaned and primed as recommended by the tape manufacturer.

B. Tapes shall be tightly applied with 1/2 uniform lap, free from wrinkles and voids to provide not less than a 100—mil thickness.
C. Field joints and fittings for wrapped pipe shall be covered by double wrapping 50—mil thick tape. Wrapping at joints shall extend a minimum of 6 inches over adjacent pipe coverings. Width of tape for wrapping fittings shall not exceed 2 inches. Adequate tension shall be applied so tape will conform closely to contours of joint.

Where a welded steel pipe casing passes through the abutment wall, the welded steel pipe casing shall be additionally wrapped with 2 layers of 15—pound asphalt-felt building paper, securely taped or wired in place.

10-7.05D MEASUREMENT AND PAYMENT:

Measurement and payment for welded steel pipe casing (bridge) for each size listed in the Engineer's Estimate shall conform to the provisions in Sections 70-1.04, "Measurement," and 70-1.05, "Payment," of the Standard Specifications.

Full compensation for furnishing and installing mortar and building paper, casing, concrete supports, and other fittings, bar reinforcement in the concrete pipe supports, and other fittings shall be considered as included in the contract prices paid per linear foot for the sizes of welded steel casing (bridge) involved, and no additional compensation will be allowed therefor.

10-7.06 STRUCTURE CONDUIT:

Structure Conduit to be installed within the bridge structure superstructure shall be Type 1 or Type 3 unless otherwise specified and as specified in Section 86-2.05, "Conduit," of the Standard Specifications with Amendments issue date 11-30-10.

The conduit between the abutment backwall and the nearest pull box shall be Type 1.

When a standard coupling cannot be used for joining Type 1 conduit, a UL listed threaded union coupling conforming to the provisions in Section 86-2.05C, "Installation," of the Standard Specifications with Amendments issue date 11-30-10 shall be used.

Conductors will be installed by the utility company unless directed to be installed by the contractor by the Engineer.

At those locations where conduit is required to be installed in the bridge approach embankment, conduit shall be placed during the stage with no public traffic.

Measurement for conduit shall be by the linear foot. Payment for conduit shall be by item of work "4 PVC Conduit" and no additional compensation will be allowed therefor.

10-7.07 SLOPE PROTECTION:

Slope protection shall be Rock Slope Protection ¼ Ton (Method B) and shall be placed or constructed in conformance with the provisions in Section 72, "Slope Protection," of the Standard Specifications with Amendments issue date 11-30-10.
Grading of rock slope protection shall conform to that indicated in Section 72-2.02 “Materials” for Light, Method B Placement. Rock slope protection shall be placed as indicated in Section 72-2.03 “Placing” of the Standard Specifications with Amendments issue date 11-30-10.

Rock slope protection fabric shall be woven or nonwoven type fabric, Type A or Type B, at the option of the Contractor. Rock slope protection fabric shall be placed as indicated in Section 72-2.025 “Rock Slope Protection Fabric” of the Standard Specifications with Amendments issue date 11-30-10.

Measurement and Payment for items of work of “RSP 1/4 Ton (Method B)” and “Rock Slope Protection Fabric” shall conform to the provisions in Section 72-2.04 “Measurement”, and Section 72-2.05 “Payment,” of the Standard Specifications with Amendments issue date 11-30-10.

10-7.08 MISCELLANEOUS METAL (BRIDGE):

Miscellaneous metal (bridge) shall conform to the provisions for miscellaneous bridge metal in Section 75, "Miscellaneous Metal," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Miscellaneous metal (bridge) shall consist of the miscellaneous bridge metal items listed in Section 75-1.03, “Miscellaneous Bridge Metal,” of the Standard Specifications with Amendments issue date 11-30-10.

Attention is directed to "Welding" of these special provisions.

Measurement and Payment for “Miscellaneous Metal (Bridge)” shall be as indicated in Section 75-1.06 “Measurement” and Section 75-1.07 “Payment” of the Standard Specifications with Amendments issue date 11-30-10.

SECTION 10-8 RIGHT OF WAY AND TRAFFIC CONTROL FACILITIES

10-8.01 ROADSIDE SIGNS:

Roadside signs shall be furnished and installed at the locations shown on the plans or where designated by the Engineer and in conformance with the provisions in Section 56-2, "Roadside Signs," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

The Contractor shall furnish roadside sign panels in conformance with the provisions in “Furnish Sign” of these special provisions.

Wood posts shall be pressure treated after fabrication in conformance with the provisions in Section 58, "Preservative Treatment of Lumber, Timber and Piling," of the Standard Specifications and AWPA Use Category System: UC4A, Commodity Specification A or B.

Type N (CA), Type P (CA), and Type R (CA) marker panels mounted on a post with a roadside sign shall be considered to be sign panels and will not be paid for as markers.

Measurement and Payment for item of work “Roadside Sign (One Post)” shall be as indicated in
Section 56-2.05 “Measurement” and Section 56-2.06 “Payment” of the Standard Specifications.

10-8.02 SURVEY MONUMENT.
Survey monuments shall conform to the provisions in Section 81, “Monuments”, of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Locations for installation of survey monuments shall be as indicated on the plans and shall be constructed as shown on the Monterey County Standard Plate 27.

Measurement and Payment for item of work “Survey Monument” shall conform to the provisions in Section 81-1.04 “Measurement” and Section 81-1.05 “Payment” of the Standard Specifications.

10-8.03 METAL BRIDGE RAILING:
Metal tube bridge railing (Type 215), metal tube bridge railing (Type 215 MOD), and Pedestrian Railing shall conform to the provisions in Section 83-1, "Railings," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Metal tube bridge railing and pedestrian railing shall be galvanized in accordance with the provisions in Section 75-1.05, "Galvanizing," of the Standard Specifications with Amendments issue date 11-30-10.

Exposed metal tube bridge railing and pedestrian railing galvanized surfaces shall be prepared and painted in conformance with the provisions in Section 59-3, "Painting Galvanized Surfaces," of the Standard Specifications and these special provisions.

Exposed metal tube bridge railing and pedestrian railing areas of galvanized surfaces shall receive a minimum of 2 finish coats of paint conforming to either the requirements for White Tintable Finish Paint-Waterborne, Formula PWB-164B, or an exterior grade latex paint meeting the requirements for SSPC-Paint 24, "Latex Semi-Gloss Exterior Topcoat," of the "SSPC: The Society for Protective Coatings," and conforming to the following:

A. No visible color change in the finish coats shall occur when tested in conformance with the requirements in ASTM Designation: G 53 using FS 40 UV-B bulbs for a minimum of 38 cycles. The cycle shall be 4 hours of ultraviolet (UV) exposure at 140° F and 4 hours of condensate exposure at 104°F.

B. The vehicle shall be an acrylic or modified acrylic copolymer with a minimum of necessary additives.

The total dry film thickness of all applications of the first finish coat shall be not less than 2 mils.

Except as approved by the Engineer, a minimum drying time of 12 hours shall be allowed between finish coats.

The second finish coat color shall match Federal Standard 595B, No. 14102, Forest Green. The total dry film thickness of all applications of the second finish coat shall be not less than 2 mils. The second finish coat shall be applied in the field after all nuts have been tightened and the alignment has been approved by the Engineer.
The 2 finish coats shall be applied in 2 or more applications to a total dry film thickness of not less than 4 mils nor more than 8 mils.

Metal beam guard railing and end caps (Type A) will not be painted. Metal box spacers, as shown on the plans, shall be galvanized and painted.

Metal tube bridge railing (Type 215 MOD) as shown on the plans will be measured and paid for as metal tube bridge railing (Type 215).

The contract price paid per linear foot for item of work “Pedestrian Railing” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in pedestrian hand rail, complete in place, including galvanizing and painting, as shown on the plans, as specified in the Standard Specifications with Amendments issue date 11-30-10 and these special provisions, and as directed by the Engineer.

The contract price paid per linear foot for metal tube bridge railing (Type 215) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in metal tube bridge railings, complete in place, including galvanizing and painting railing and metal box spacers, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-8.04 CONCRETE BARRIER:

Concrete barriers shall conform to the provisions in Section 83-2, "Barriers," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions. Concrete Barriers shall be Concrete Barrier (Type 732A) and Concrete Barrier (Type 732B) at locations and as shown on the plans.

Measurement and Payment for items of work “Concrete Barrier (Type 732A)” and “Concrete Barrier (Type 732B)” shall be as specified in Section 83-2.03 “Measurement” and Section 83-2.04 “Payment” of the Standard Specifications.

10-8.04A ARCHITECTURAL SURFACE (TEXTURED CONCRETE):

Architectural textures, called aesthetic treatment on the plans, for all exposed surfaces of concrete barriers shall conform to the details shown on the plans and the provisions in Section 51, "Concrete Structures," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Architectural texture is required at both faces, both ends, and top surfaces of the concrete barriers shown on the plans. Top surfaces may be stamped using compatible concrete stamps or stamps and "joints" by hand work.

Corners at the intersection of plane surfaces shall be sharp and crisp without easing or rounding. A Class 1 surface finish shall be applied to the architectural texture.

10-8.04B REFEREE SAMPLE:

The architectural texture shall match the texture, color, and pattern of the referee sample, which
is a retaining wall located on the west side of State Route 1, north of Carmel Valley Road in the City of Carmel, California. The color shall be added when the concrete is mixed.

10-8.04C TEST PANEL:
A test panel at least 4' x 4' in size shall be successfully completed at a location approved by the Engineer before beginning work on architectural textures. The test panel shall be constructed and finished with the materials, tools, equipment, and methods to be used in constructing the architectural texture. If ordered by the Engineer, additional test panels shall be constructed and finished until the specified finish, texture, and color are obtained, as determined by the Engineer.

The test panel approved by the Engineer shall be used as the standard of comparison in determining acceptability of architectural texture for concrete surfaces.

10-8.04D FORM LINERS:
Form liners shall be used for textured concrete surfaces and shall be installed in conformance with the manufacturer's recommendations, unless other methods of forming textured concrete surfaces are approved by the Engineer. Form liners shall be manufactured from an elastomeric material or a semi-elastomeric polyurethane material by a manufacturer of commercially available concrete form liners. No substitution of other types of formliner material will be allowed. Form liners shall leave crisp, sharp definition of the architectural surface.

Recurring textural configurations exhibited by repeating, recognizable shadow patterns shall be prevented by proper casting of form liner patterns. Textured concrete surfaces with such recurring textural configurations shall be reworked to remove such patterns as approved by the Engineer or the concrete shall be replaced.
Form liners shall have the following properties:

<table>
<thead>
<tr>
<th>Description</th>
<th>ASTM Designation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elastomeric material Shore A hardness</td>
<td>D 2240</td>
<td>50 to 65</td>
</tr>
<tr>
<td>Tensile strength (psi)</td>
<td>D 412</td>
<td>130 to 900</td>
</tr>
<tr>
<td>Semi-elastomeric polyurethane Shore D hardness</td>
<td>D 2240</td>
<td>55 to 65</td>
</tr>
<tr>
<td>Tensile strength (psi)</td>
<td>D 2370</td>
<td>2600 minimum</td>
</tr>
</tbody>
</table>

Cuts and tears in form liners shall be sealed and repaired in conformance with the manufacturer's recommendations. Form liners that are delaminated from the form shall not be used. Form liners with deformations to the manufactured surface caused by improper storage practices or any other reason shall not be used.

Form liners shall extend the full length of texturing with transverse joints at 8 foot minimum spacing. Small pieces of form liners shall not be used. Grooves shall be aligned straight and true. Grooves shall match at joints between form liners. Joints in the direction of grooves in grooved patterns shall be located only in the depressed portion of the textured concrete. Adjoining liners shall be butted together without distortion, open cracks, or offsets at the joints. Joints between liners shall be cleaned before each use to remove any mortar in the joint.
Adhesives shall be compatible with the form liner material and with concrete. Adhesives shall be approved by the liner manufacturer. Adhesives shall not cause swelling of the liner material.

10-8.04E RELEASING FORM LINERS:

Products and application procedures for form release agents shall be approved by the form liner manufacturer. Release agents shall not cause swelling of the liner material or delamination from the forms. Release agents shall not stain the concrete or react with the liner material. For reliefs simulating fractured concrete or wood grain surfaces the application method shall include the scrubbing method using a natural bristle scrub brush in the direction of grooves or grain. The release agent shall coat the liner with a thin film. Following application of form release agent, the liner surfaces shall be cleaned of excess amounts of agent using compressed air. Buildup of form release agent caused by the reuse of a liner shall be removed at least every 5 uses.

Form liners shall release without leaving particles or pieces of liner material on the concrete and without pulling or breaking concrete from the textured surface. The concrete surfaces exposed by removing forms shall be protected from damage.

10-8.04F ABRASIVE BLASTING:

The architectural texture shall be abrasive blasted with fine abrasive to remove the sheen without exposing coarse aggregate.

10-8.04G CURING:

Concrete surfaces with architectural texture shall be cured only by the forms-in-place or water methods. Seals and curing compounds shall not be used.

10-8.04H MEASUREMENT AND PAYMENT:

Architectural texture will not be measured for payment.

Full compensation for architectural surface (textured concrete) shall be considered as included in the contract prices paid per linear foot for the types of concrete barriers shown in the Engineer's Estimate and no separate payment will be made therefor.

10-8.05 THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKING:

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, "Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

Thermoplastic material shall be free of lead and chromium and shall conform to the requirements in State Specification PTH-02ALKYD.

Retroreflectivity of the thermoplastic traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement
markings shall have a minimum initial retroreflectivity of 250 mcd·m⁻²·lx⁻¹. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 50 mcd·m⁻²·lx⁻¹.

Where striping joins existing striping as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Thermoplastic material for traffic stripes shall be applied at a minimum rate as determined by the Engineer. The minimum application rate is based on a solid stripe of 4 inches (100 mm) in width.

Thermoplastic traffic stripes shall be applied at the minimum thickness and application rate as specified below. The minimum application rate is based on a solid stripe of 4 inches (100 mm) in width.

<table>
<thead>
<tr>
<th>Minimum Stripe Thickness (inch) {mm}</th>
<th>Minimum Application Rate (inch) {kg/m}</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.079-inch {2.0}</td>
<td>0.27-lb./ft. {0.4}</td>
</tr>
<tr>
<td>0.098-inch {2.5}</td>
<td>0.34-lb./ft. {0.5}</td>
</tr>
</tbody>
</table>

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

Measurement and Payment for "Thermoplastic Traffic Stripe" and "Thermoplastic Marking" shall be as indicated in Section 84-2.05 "Measurement" and 84-2.06 "Payment" of the Standard Specifications.

10-8.06 PAVEMENT MARKERS:

Pavement markers shall be placed in conformance with the provisions in Section 85, "Pavement Markers," of the Standard Specifications and these special provisions.

Attention is directed to "Traffic Control System For Lane Closure" of these special provisions regarding the use of moving lane closures during placement of pavement markers with bituminous adhesive.

The Contractor shall furnish the Engineer certificates of compliance for the pavement markers in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

Retroreflective pavement markers shall be marked as abrasion resistant on the body of the markers.

Retroreflective pavement markers placed in pavement recesses shall be cemented with a flexible, polymer-modified, hot-melt asphaltic adhesive conforming to the following requirements:
<table>
<thead>
<tr>
<th>Specification</th>
<th>ASTM Designation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penetration, mm, 100 g, 5 seconds, 25°C</td>
<td>D 5</td>
<td>3.0 Maximum</td>
</tr>
<tr>
<td>Softening Point, °C</td>
<td>D 36</td>
<td>93 Minimum</td>
</tr>
<tr>
<td>Brookfield Thermosel Viscosity, Pa s, No. 27 Spindle, 20 RPM, 191°C</td>
<td>D 4402</td>
<td>2.5 - 6</td>
</tr>
<tr>
<td>Ductility, cm, 5 cm/minute, 25°C</td>
<td>D 113</td>
<td>15 Minimum</td>
</tr>
<tr>
<td>Ductility, cm, 1 cm/minute, 4°C</td>
<td>D 113</td>
<td>5 Minimum</td>
</tr>
<tr>
<td>Flexibility</td>
<td>D 3111&quot;.1, .2, .3, .4</td>
<td>No breaks or cracks</td>
</tr>
</tbody>
</table>

Notes:
1. Modify ASTM Designation: D 3111, Paragraph 6, to "The test apparatus consists of a mandrel one inch in diameter by 3 inch to 6 inch in length, supported at each end."
2. Modify ASTM Designation: D 3111, Paragraph 7, to "The test specimen dimensions are one inch wide, 6 inch long, and 1/8 inch thick."
3. Modify ASTM Designation: D 3111, Paragraph 8, to "Condition the test specimens and apparatus for 4 hours at 19° F before testing.
4. Modify ASTM Designation: D 3111, Paragraph 10.5, to "Bend the test specimens 90° over the mandrel at a uniform rate in 10 seconds while maintaining intimate contact with the mandrel."

Testing of adhesive bond strength will be performed on sandblasted concrete brick surface in conformance with the requirements in California Test 669 and these special provisions. The concrete brick surface will be sandblasted in conformance with the requirements in California Test 423. The test plugs of 2-inch diameter will be conditioned at 221° F for a minimum of 2 hours before bonding to the sandblasted concrete surface. The adhesive sample will be heated to the application temperature as recommended by the manufacturer and a sample of 3 inch diameter in area will be poured onto the sandblasted concrete surface. The heated plug will immediately be pressed onto the puddle of hot adhesive to squeeze out excess adhesive. The excess adhesive extruding from under the plug will be removed. The assembly will be allowed to cure for 24 hours at 73° F ± 3.6° F and then be tested to bond failure at a crosshead speed of 2 inches per minute. The reported peak load and the bond strength value will be the average of 3 tests, respectively. The same bond strength test will be performed on retroreflective pavement markers. Instead of placing the heated adhesive sample on the sandblasted concrete surface, it will be placed on the bottom of the pavement markers.

Minimum bond strength to the sandblasted concrete brick surface shall be 100 psi and minimum bond strength to retroreflective pavement markers shall be 119 psi.

Adhesive placed in pavement recesses shall be applied as recommended by the manufacturer.

Retroreflective pavement markers placed in pavement recesses will be measured and paid for as pavement marker (retroreflective-recessed).

Measurement of Pavement Markers (Retroreflective) shall be as indicated in Section 85-1.08 "Measurement" and Section 85-1.09 "Payment" of the Standard Specifications.

10-8.07 MARKERS AND DELINEATORS:

Markers and delineators shall conform to the provisions in Section 82, "Markers and Delineators," of the Standard Specifications and these special provisions.

Markers and delineators on flexible posts shall conform to the provisions in "Prequalified and
Tested Signing and Delineation Materials" of these special provisions. Flexible posts shall be made from a flexible white plastic which shall be resistant to impact, ultraviolet light, ozone, and hydrocarbons. Flexible posts shall resist stiffening with age and shall be free of burns, discoloration, contamination, and other objectionable marks or defects which affect appearance or serviceability.

Retroreflective sheeting for metal and flexible target plates shall be the retroreflective sheeting designated for channelizers, markers, and delineators conforming to the requirements in ASTM Designation: D 4956-95 and in conformance with the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

10-8.08 METAL BEAM GUARD RAILING:
Metal beam guard railing shall be constructed in conformance with the provisions in Section 83-1, "Railings," of the Standard Specifications with Amendments issue date 11-30-10 and these special provisions.

Attention is directed to "Order of Work" of these special provisions.

Line posts shall be wood. Blocks shall be wood.

Measurement and Payment for item of work “Metal Beam Guard Railing” shall conform to the provisions in Section 83-1.03 “Measurement” and Section 83-1.04 “Payment” of the Standard Specifications.

10-8.09 TERMINAL SYSTEM (TYPE SRT):
Terminal system (Type SRT) shall be furnished and installed as shown on the plans and in conformance with these Special Provisions.

Terminal system (Type SRT) shall be a SRT-350 Slotted Rail Terminal (8 post system) as manufactured by Trinity Industries, Inc., or approved equal, and shall include all the items detailed for terminal system (Type SRT) shown on the plans.

The Contractor shall provide the Engineer with a Certificate of Compliance from the manufacturer in conformance with the provisions in Section 6-1.07, “Certificates of Compliance,” of the Standard Specifications with Amendments issue date 11-30-10. The Certificate of Compliance shall certify that terminal systems (Type SRT) conform to the contract plans and specifications, conform to the prequalified design and material requirements and were manufactured in conformance with the approved quality control program.

The terminal system (Type SRT) shall be installed in conformance with the manufacturer’s installation instructions and these requirements. The steel foundation tubes with soil plates attached, shall be, at the Contractor’s option, either driven, with or without pilot holes, or placed in drilled holes. Space around the steel foundation tubes shall be backfilled with selected earth, free of rock, placed in layers approximately 4 inches thick and each layer shall be moistened and thoroughly compacted. Wood terminal posts shall be inserted into the steel foundation tubes by hand. Before the wood terminal posts are inserted, the inside surfaces of the steel foundation tubes to receive the wood posts shall be coated with a grease which will not melt or run at a temperature of 149°F or less. The edges of the wood terminal posts may be slightly rounded to facilitate insertion of the post into the steel foundation tubes.
Surplus excavated material remaining after the terminal system (Type SRT) has been constructed shall be disposed of in a uniform manner along the adjacent roadway where designed by the Engineer.

The quantity of end anchor assembly, Terminal System (Type SRT), and rail tensioning assemblies shall be measured as units determined from actual count for each location installed.

Measurement for Terminal System (Type SRT) shall be as each unit determined by actual count.

Payment for Terminal System (Type SRT) shall be as indicated in Section 83.1.04 “Payment” for various types of terminal sections.

10-8.10 SPEED HUMP:
Speed Humps shall be installed as shown on the “Traffic Signing and Striping Plan” sheet. Speed Humps shall be as indicated in the FHWA – MUTCD 2003 Revision 1 as amended for use in California.

Measurement for item of work “Speed Hump” shall be by each location installed.

Payment for item of work “Speed Hump” shall include full compensation for all labor, materials, tools, equipment and incidentals, and for doing all the work involved in construction the speed humps as shown on the plans. Pavement markings required by the detail for Speed Hump shall be included in the contract price for speed hump and no further compensation shall be allowed therefor.
SECTION 11 - PERMITS AND AGREEMENTS

California Department of Fish and Game Agreement,

U.S. Army Corps of Engineers Permit,

California Regional Water Quality Control Board Certification,

United States Department of the Interior – Fish and Wildlife Service - Biological Opinion

United States Department of Commerce – National Oceanic and Atmospheric Administration National Marine Fisheries Service – Informal Consultation Concurrence,

CEQA – EIR - Notice of Determination,

NEPA – Finding of No Significant Impact,

Sedimentation and Erosion Control Plan,

Biological Mitigation Measures,

Construction Window Begin and End dates.
Doug Poochigian, Bridge Engineer
Monterey County
Public Works Department
168 West Alisal Street, 2nd Floor
Salinas, California 93901

Subject: Stream Alteration Agreement No. 2004-0216-R3
Carmel River - Monterey County

Dear Mr. Poochigian:

The Department of Fish and Game has completed the agreement process. A Notice of Determination will be filed with the Office of Planning and Research, in accordance with California Environmental Quality Act (CEQA).

Your copy of the signed agreement is enclosed. You may proceed with your Project according to the terms and provisions of your Stream Alteration Agreement, if you have obtained all other permits required by local, other state, and federal agencies. The Department's determination may be legally challenged within 30 days following the filing of the Notice of Determination. As a result, you may wish, but are not required, to delay commencement of your Project until after the 30-day period expires.

If you have any questions regarding this matter, please contact Julie Means, Senior Environmental Scientist, at the above letterhead address or by telephone at (559) 243-4014, extension 240. Thank you for your cooperation.

Sincerely,

[Signature]
E. Loudermilk
Regional Manager

Enclosure
NOTICE OF DETERMINATION

TO: Office of Planning and Research  FROM: California Department of Fish and Game
    Post Office Box 3044  Central Region
    Sacramento, California 95814  1234 East Shaw Avenue
    cc: Office of the Clerk  Fresno, California 93710
    Monterey County

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the
         Public Resources Code

PROJECT TITLE: Schulte Road Bridge No. 501 Replacement Project, Agreement 2004-0216-R3

STATE CLEARINGHOUSE NUMBER: NA

LEAD AGENCY: County of Monterey
CONTACT: Doug Poochigian (831) 755-4888

RESPONSIBLE AGENCY: California Department of Fish and Game
CONTACT: Brian Erlandsen (559) 243-4014

PROJECT LOCATION: Within or adjacent to the Carmel River 36° 31' 31" North Latitude, 121°
                  49' 53" West Longitude (NAD83/WGS84), approximately four miles east of Carmel, in Monterey County.
                  (Figure I). More specifically, work will occur on Schulte Road over the Carmel River, approximately
                  four miles east of the city of Carmel in Monterey County.

PROJECT DESCRIPTION: The California Department of Fish and Game is executing a Lake and
                     Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game Code to the project
                     applicant, the County of Monterey, represented by Doug Poochigian. The applicant proposes to replace
                     the existing Schulte Road Bridge, which is 190-feet long and spans the Carmel River. The bridge does not
                     meet current Caltrans seismic, structural, and geometric standards and, because it is a one-lane bridge,
                     does not meet the level of service for the two-lane road approaching the crossing.

This is to advise that the California Department of Fish and Game as a Responsible Agency approved the
project described above on 1/6/08 and has made the following determinations regarding the above described project.

The project [ will √ will not] have a significant effect on the environment.
An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
Mitigation measures [ √ were were not] made a condition of the approval of the project.
A Statement of Overriding Considerations [ √ was was not] adopted for the project.
Findings [ √ were were not ] made pursuant to the provisions of CEQA.

This is to certify that a copy of the Environmental Impact Report prepared for this project is available to
the general public and may be reviewed at: the County of Monterey Department of Public Works, 312
East Alisal Street, Salinas, CA 93901. Please contact the person specified above.

Date: 1/6/08  W. E. Loudermilk, Regional Manager  Central Region
       California Department of Fish and Game

Date received for filing at OPR: ___________________________
AGREEMENT

California Fish and Game Code Section 1602
Stream Alteration Agreement No. 2004-0216-R3
Carmel River – Monterey County

Parties:

California Department of Fish and Game
Central Region
1234 East Shaw Avenue
Fresno, California 93710

Doug Poochigian
Monterey County
Department of Public Works
312 East Alisal Street
Salinas, California 93901

WHEREAS:

1. Mr. Timothy Lacey of LSA Associates, on behalf of Doug Poochigian, representing the County of Monterey (jointly referred to as the "Operator"), on March 31, 2004, notified ("Notification" No. 2004-0216-R3) the Department of Fish and Game (Department) of their intent to divert or obstruct the natural flow of, or change the bed or banks of, or use materials from the Carmel River in Monterey County, waters over which the Department asserts jurisdiction pursuant to Division 2, Chapter 6 of the California Fish and Game Code.

2. The Operator may not commence any activity that is subject to Fish and Game Code Sections 1600 et seq. until the Department has found that such Project shall not substantially adversely affect an existing fish or wildlife resource or until the Department's proposals, or the decisions of a panel of arbitrators, have been incorporated into such projects.

3. Fish and Game Code Sections 1600 et seq. make provisions for the negotiation of agreements regarding the delineation and definition of appropriate activities, Project modifications and/or specific measures necessary to protect fish and wildlife resources.

4. The Department has determined that without the mitigative features identified in this Agreement, the activities proposed in the Notification could substantially adversely affect fish and wildlife.

Agreement No. 2004-0216-R3
Doug Poochigian – County of Monterey
Carmel River – Monterey County
NOW THEREFORE, IT IS AGREED THAT:

1. The receipt of this document ("Agreement"), by the Operator, satisfies the Department's requirement to notify the Operator of the existence of an existing fish and wildlife resource that may be substantially adversely affected by the Project that is described in the Notification.

2. The contents of this Agreement constitute the Department's proposals as to measures necessary to protect fish and wildlife resources, and satisfy the Department's requirement to submit these proposals to the Operator.

3. The signature of the Operator's representative on this Agreement constitutes the Operator's commitment to incorporate Department's proposals into the Project described in the Notification.

4. This Agreement does not exempt the Operator from complying with all other applicable local, State and Federal law, or other legal obligations.

5. This Agreement, alone, does not constitute or imply the approval or endorsement of a Project, or of specific Project features, by the Department of Fish and Game, beyond the Department's limited scope of responsibility, established by Code Sections 1600 et seq. This Agreement does not therefore assure concurrence, by the Department, with the issuance of permits from this or any other agency. Independent review and recommendations shall be provided by the Department as appropriate on those projects where local, State or Federal permits or environmental reports are required.

6. This Agreement does not authorize the "take" (hunt, pursue, catch, capture, kill, or attempt) of State-listed threatened or endangered species. If the Operator, in the performance of the agreed work, discovers the presence of a listed species in the Project work area, work shall stop immediately. The Operator shall not resume activities authorized by this Agreement until such time as valid "take" permits are obtained from the Department pursuant to Fish and Game Code Sections 2081(a) and 2081(b) as appropriate.

7. To the extent that Provisions of this Agreement provide for the diversion of water, they are agreed to with the understanding that Operator possesses the legal right to so divert such water.

8. To the extent that the Provisions of this Agreement provide for activities that require the Operator to trespass on another owner's property, they are agreed to with the understanding that the Operator possesses the legal right to so trespass.

9. To the extent that the Provisions of this Agreement provide for activities that are subject to the authority of other public agencies, said activities are agreed to with the understanding that all appropriate permits and authorizations shall be obtained prior to commencing agreed activities.

10. All Provisions of this Agreement remain in force throughout the term of the Agreement. Any Provision of the Agreement may be amended at any time, provided such amendment is

Agreement No. 2004-0216-R3
Doug Poochigan – County of Monterey
Carmel River – Monterey County

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1. The Operator shall provide a copy of the Agreement to the Project supervisors and all contractors and subcontractors. Copies of the Agreement shall be available at work sites during all periods of active work and shall be presented to Department personnel upon demand.

2. The Operator agrees to provide the Department access to the Project site at any time to ensure compliance with the terms, conditions, and Provisions of this Agreement.

3. The Operator and any contractor or subcontractor, working on activities covered by this Agreement, are jointly and separately liable for compliance with the Provisions of this Agreement. Any violation of the Provisions of this Agreement is cause to stop all work immediately until the problem is reconciled. Failure to comply with the Provisions and requirements of this Agreement may result in prosecution.

4. The Operator assumes responsibility for the restoration of any fish and wildlife habitat which may be impaired or damaged either directly or, incidental to the Project, as a result of failure to properly implement or complete the mitigative features of this Agreement, or from activities which were not included in the Operator's Notification.

5. It is understood that the Department enters into this Agreement for purposes of establishing protective features for fish and wildlife, in the event that a Project is implemented. The decision to proceed with the Project is the sole responsibility of the Operator, and is not required by this Agreement. It is agreed that all liability and/or incurred costs, related to or arising out of the Operator’s Project and the fish and wildlife protective conditions of this Agreement, remain the sole responsibility of the Operator. The Operator agrees to hold harmless and defend the Department of Fish and Game against any related claim made by any party or parties for personal injury or other damage.

6. The terms, conditions, and Provisions contained herein constitute the limit of activities agreed to and resolved by this Agreement. The signing of this Agreement does not imply that the Operator is precluded from doing other activities at the site. However, activities not specifically agreed to and resolved by this Agreement are subject to separate notification pursuant to Fish and Game Code Sections 1600 et seq.

California Environmental Quality Act (CEQA) Compliance: The Operator’s concurrence signature on this Agreement serves as confirmation to the Department that the activities conducted under the terms of this Agreement are consistent with the Project as described in the Environmental Impact Report (EIR) prepared by the Monterey County Department of Public Works (County) for the Schulte Road Bridge No. 501 Project. The EIR regarding the Project was approved by the County Board of Supervisors as Lead Agency, on July 23, 2002. A copy of the EIR including Certification for the Project was provided with the Section 1602 Notification.

Agreement No. 2004-0216-R3
Doug Poochigian – County of Monterey
Carmel River – Monterey County
The Department, as a CEQA Responsible Agency, shall make findings and submit a Notice of Determination to the State Clearinghouse upon signing this Agreement.

This Agreement contains a Monitoring and Reporting Program (MRP), to incorporate monitoring and reporting requirements for the activities authorized in this Agreement.

**Project Location:** The work authorized by this Agreement will occur within or adjacent to the Carmel River (Figure 1), at the Schulte Road Bridge, 36° 31' 31" North Latitude, 121° 49' 53" West Longitude (NAD83/WGS84), approximately four miles east of Carmel, in Monterey County. Unless changes are submitted and approved by the Department, the Project shall be built in the location indicated on the maps/drawings that were submitted with the Notification.

**Project Description:** The Operator’s Notification includes Fish and Game Notification Form FG2024, biological resource assessment, plan drawings, maps and other submitted information. The Notification comprises the Operator’s Project description, and it is used as the basis for establishing the protective Provisions that are included in this Agreement. Any changes or additions to the Project as described in the Notification shall require additional consultation and protective Provisions. The Department’s CEQA Determination is based upon the Operator’s commitment to full implementation of the Provisions of this Agreement.

The Operator has proposed to replace the existing Schulte Road Bridge, which is 190-feet long and spans the Carmel River. The bridge does not meet current Caltrans seismic, structural, and geometric standards and, because it is a one-lane bridge, does not meet the level of service for the two-lane road approaching the crossing. The following activities are authorized by this Agreement:

- Removal of the existing 190-foot long, one-lane bridge crossing over the Carmel River
- Installation of a new 206-foot long, 31.5-feet wide, two-lane, pre-stressed concrete structure with a pedestrian sidewalk on one side
- Installation of temporary access ramps constructed of clean river gravel within the channel of the river for construction purposes
- Stabilization of existing abutments using rock slope protection

**Plant and Animal Species of Concern:** This Agreement is intended to minimize and mitigate adverse impacts to the wildlife resources that may occupy this area of the Carmel River and the immediate adjacent habitat. Special-status species that could potentially be impacted are the steelhead – south central California coast evolutionary significant unit (*Oncorhynchus mykiss irideus*), California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), Southwestern pond turtle (*Clemmys marmorata pallida*), Carmel Valley bush mallow (*Malacothamnus palmeri var. involucratus*), Carmel Valley malacothrix
(Malacothrix saxatilis var. arachnoidea), (Castilleja densiflora ssp. obispoensis), Eastwood’s
goldenbush (Ericameria fasciculata), Hickman’s onion (Allium hickmanii), as well as other
birds, mammals, fish, reptiles, amphibians, invertebrates and plants that comprise the local
ecosystem.

PROVISIONS:

General

1. Agreed activities within the streams may commence after the Department has signed this
   Agreement and pre-Project Provisions and protective features are implemented. This Agreement
   shall remain in effect for five (5) years beginning on the date signed by the Department. If the
   Project is not completed prior to the expiration date defined above, the Operator shall contact the
   Department to negotiate a new expiration date and any new requirements.

2. When known, the Operator shall provide a construction/work schedule to the Department
   (mail, or fax to (559) 243-4020, with reference to Agreement 2007-0216-R3) prior to beginning
   any activities covered by this Agreement. The Operator shall also notify the Department upon
   the completion of the activities covered by this Agreement.

3. Prior to starting any activity within the stream, all workers shall have received training from
   the Operator on the contents of this Agreement, the resources at stake, and the legal
   consequences of non-compliance.

4. Any native vegetation damaged or removed incidental to Project activities, shall be subject
   to compensatory mitigation as described in the Restoration provisions below. Any such
   mitigation shall be implemented by the Operator above and beyond any restoration proposed in
   the Notification and shall be incorporated into any monitoring plan proposed by the Operator.

Flagging/Fencing

5. Within the stream corridors, the Operator shall identify the upstream and downstream limits
   of the minimum required work area, the Project footprint, and other encroachments into the
   stream including any required vehicle access corridors. These limits shall be identified by the
   Operator prior to construction. All areas within the identified work area limits shall be
   considered Environmentally Sensitive Areas (ESA) and shall not be disturbed. Flagging/fencing
   shall be maintained in good repair for the duration of the Project.

Listed/Sensitive Species

6. This Agreement does not allow for the “take,” or incidental “take,” of any State-listed or
   Federal-listed threatened or endangered species.

7. The Operator affirms that no "take" of listed species will occur as a result of this Project
   and will take prudent measures to ensure that all “take” is avoided. The Operator acknowledges
   that they fully understand that they do not have State incidental “take” authority.

Agreement No. 2004-0216-R3
Doug Pocchian – County of Monterey
Carmel River – Monterey County

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8. If any State- or Federal-listed Threatened or Endangered species occur within the proposed
work area or could be impacted by the work proposed, and thus “taken” as a result of Project
activities, the Operator is responsible for obtaining and complying with required State and
Federal threatened and endangered species permits or other written authorization before
proceeding with this Project.

9. Liability for any “take,” or incidental “take,” of such listed species remains the separate
responsibility of the Operator for the duration of the Project.

10. The Operator shall immediately notify the Department of the discovery of any such rare,
threatened, or endangered species prior to and/or during construction.

**Wildlife**

11. If any wildlife is encountered during the course of construction, said wildlife shall be
allowed to leave the construction area unharmed.

12. All instream Project activities must be performed in isolation from surface water flow. The
operator shall construct coffer dams to divert flows around the excavation site (see Diversion and
Dewatering). A Project biologist shall monitor the affected section of stream to ensure aquatic
and semi-aquatic animals are not stranded due to diversion and dewatering activities.
Reasonable efforts shall be made to carefully capture and transport stranded wildlife to upstream
or downstream areas as appropriate. Captured aquatic animals shall be placed in buckets filled
with water from the Carmel River prior to transport.

**Steelhead**

13. All work shall be completed during daylight hours, and within a time window of between
June 15 and October 15 or the first significant fall rainfall. This is to take advantage of low
stream flows and to avoid the spawning and egg/alevin incubation period of steelhead
(*Oncorhynchus mykiss irideus*).

14. Project activities must be performed in isolation from surface water flow. If necessary, the
operator shall construct coffer dams to divert flows around the excavation site (see Diversion and
Dewatering below). Upon Project completion, diversion structures shall be removed from the
stream in such a manner as to allow for the least amount of disturbance to the substrate. Clean
river gravel, if used, may be left in the stream, but stream flow must be returned to its natural
course.

15. No heavy equipment shall operate in the active stream channel, except as necessary to
construct coffer dams to divert stream flow and isolate the work site.

**California red-legged frog**

16. Ground disturbing activities in potential California red-legged frog (CRLF) habitat shall be
restricted to the period between July 1 and October 15.
17. A qualified biologist shall survey the work site at least two (2) weeks before the onset of activities. The biologist shall cordon off as ESA, potential CRLF habitat to the maximum extent while still allowing the completion of Project goals. If CRLF adults, tadpoles, or eggs are found the biologist shall contact the Department for further direction or consultation as appropriate.

18. Prior to the commencement of any ground disturbance, a qualified biologist shall conduct a training session for all construction personnel. At a minimum the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the work site, and identification of work site ESA boundaries where construction may not occur.

19. If the work site is temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 0.5-millimeters to prevent CRLF eggs and tadpoles from entering the pump system. Water shall be released or pumped in a manner and at an appropriate rate to maintain unimpeded downstream flows during construction. Any instream pools isolated from surface water flows shall maintain an appropriate elevation to support developing eggs and/or tadpoles. Upon completion of construction activities, any barriers to flow shall be removed in a manner that returns stream flow to its natural channel with the least disturbance to the substrate.

20. The Operator shall implement exclusion measures (e.g., silt fencing) surrounding the work site to prevent access by, and potential take of, any CRLF that may occur on the site. Prior to the commencement of construction activities, the Operator shall ensure that exclusion measures are in place. The Project biologist shall inspect the work area within the exclusion zone to verify absence of CRLF or any other special-status species. If any such species are observed, the Operator shall contact the Department for further direction or consultation as appropriate.

Birds

21. To protect nesting birds, construction activities between March 1 and September 1 shall only occur after the following surveys are completed by a qualified biologist:

**Raptors:** Survey for nesting activity of raptors within 500 feet of the construction site. Surveys shall be conducted at appropriate nesting times and concentrate on mature trees. If any active nests are observed, these nests and nest trees shall be designated an ESA and construction shall be suspended until the Operator consults with Department for additional protective provisions.

**Other Avian Species:** Survey for nesting activity within 250 ft of the defined work area 2 to 3 weeks before construction begins. If any nesting activity is found, construction activities shall be suspended and the Operator shall contact the Department and additional protective provisions, specific to each incident, shall be developed.

**Swallows:** If work on the structures cannot be avoided between March 1 and September 1, then prior to February 15 a qualified biologist shall survey beneath the structures to ensure...
no swallow nesting activity has begun. If swallows are observed nesting on the structures, construction activities must be suspended until the end of the nesting season. If no nesting activity is observed on the structures, the Operator shall remove any pre-existing, unoccupied nests and shall prevent any new nests from being constructed by implementing exclusion methods developed in consultation with the Department. Where disturbance will occur, nesting must be discouraged throughout the Project term.

Bats

22. Bats shall not be disturbed without specific notice to and consultation with the Department. Preconstruction surveys by a qualified biologist shall be performed to determine if bat species are utilizing the existing bridge for roosting. If bats are observed using the existing bridge as a roosting site, Department-approved exclusion devices shall be installed a minimum of four (4) weeks prior to bridge removal. If after four (4) weeks exclusion measures are unsuccessful and bat species still utilize the bridge for roosting, the Operator shall contact the Department and mitigation shall be developed in consultation with the Department.

23. If Department determines the new bridge structure does not provide adequate replacement habitat for bats, the structure shall be retrofitted with suitable roosting appurtenances developed in consultation with the Department.

Vegetation

24. A qualified botanist shall survey the entire area of potential effect for special-status plant species listed above. If any such plants are observed in the construction area, they shall be surrounded by ESA fencing, excluded from construction activities, and the Department consulted for additional necessary protective provisions.

25. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations (with the exception of exotic plant species) and shall only occur within the defined work area. Precautions shall be taken to avoid other damage to vegetation by people or equipment.

26. Native riparian shrubs and trees, and oak trees with trunks greater than or equal to four (4) inches diameter at breast height (DBH), if removed during Project activities shall be mitigated for by implementation of a Revegetation Plan (see Restoration below).

27. The Operator shall remove nonnative vegetation [e.g., common periwinkle (Vinca minor), Cape ivy (Delairea odorata), wild fennel (Foeniculum vulgare), Castor bean (Ricinus communis), giant water reed (Arundo donax), etc.], including stumps and roots from all areas within the Project area. The nonnative vegetation shall be removed in a manner so that it does not promulgate or propagate and the area shall be restored with native vegetation to prevent erosion. Native species planted in place of removed nonnatives shall be determined upon consultation with the Department.

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Doug Peachige - County of Monterey
Carmel River - Monterey County

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Vehicles

28. Vehicles shall not be operated in areas where surface water is present. Vehicles shall only operate in the channel during naturally dry conditions or while the affected section of stream is dewatered (see Diversion and Dewatering).

29. Vehicles operated in or adjacent to the stream channel shall be limited to the minimum necessary to complete Project activities. Ingress and egress corridors shall be minimized and restricted to predetermined locations where impacts to vegetation are minimal. All other areas adjacent to the work site shall be considered an ESA and shall remain off-limits to construction equipment. Vehicle corridors and the ESA shall be identified by the Operator and shall be fenced/flagged as described above.

30. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life.

31. Fueling and maintenance of vehicles, other equipment, and staging areas shall occur at least 75 feet from any riparian habitat or water body. The Operator shall ensure contamination of habitat does not occur during such operations.

Erosion

32. The Operator shall develop plans to control erosion and stabilize areas subject to ground disturbance during construction. A Construction Period Erosion Prevention and Contingency Plan shall be prepared and implemented prior to commencement of Project activities. The Plan may include or be comprised of a statement of Best Management Practices (BMPs), winterization plan, etc. used to prevent pollution of surface water.

33. All disturbed soils within the Project site shall be stabilized to reduce erosion potential, both during and following construction. Planting, seeding with native species, and mulching is conditionally acceptable. Where suitable vegetation cannot reasonably be expected to become established, non-erodible material shall be used for such stabilization. Any installation of non-erodible material, not included in the original Project description, shall be coordinated with the Department (see Restoration below).

34. Silty water shall not be discharged into the stream, or created within the stream. The Operator’s proposed plan to minimize siltation shall be addressed in the Construction Period Erosion Prevention and Contingency Plan described in Provision 25 above. Precautions to minimize siltation require that instream work be isolated from stream flow to prevent silt or other deleterious materials from discharging into the stream and to downstream reaches. If it is determined that silt levels resulting from Project related activities constitute a threat to aquatic life, activities associated with the siltation shall be halted until effective Department-approved control devices are installed, or abatement procedures are initiated.
Pollution

35. Raw cement, concrete or washings thereof, asphalt, drilling fluids or lubricants, paint or
other coating material, oil or other petroleum products, or any other substances which could be
hazardous to fish or wildlife resulting from or disturbed by Project related activities, shall be
prevented from contaminating the soil and/or entering the Carmel River.

36. Prior to the onset of work, the Operator shall prepare a Spill Response Plan to facilitate
prompt and effective response to any accidental spills. All workers shall be informed of the
importance of preventing spills and of the appropriate measures to take should a spill occur. The
cleanup of all spilled materials shall begin immediately. The Department shall be notified
immediately by the Operator of any spills.

37. Staging and storage areas for equipment, materials, fuels, lubricants, and solvents shall be
located at least 75 feet from the stream channel and banks. Stationary equipment such as motors,
pumps, generators, compressors and welders, located within or adjacent to the stream, shall be
positioned over drip-pans.

38. All Project generated debris, materials and rubbish shall not be deposited in the stream and
shall be removed from areas where such materials could be washed into the stream.

39. The Operator and all contractors shall be subject to the water pollution regulations found in
the Department of Fish and Game Code Sections 5650 and 12015.

Diversion and Dewatering

40. All instream Project activities must be performed in isolation from surface water flow. The
operator shall construct coffer dams to divert flows around the excavation site. Upon Project
completion, diversion structures shall be removed from the stream in such a manner as to allow
for the least amount of disturbance to the substrate. Clean river gravel, if used, may be left in the
stream, but stream flow must be returned to its natural course.

41. Water drafting, pumping, or other water diversion shall be done in a manner that is not
harmful to fish or other aquatic or semi-aquatic wildlife. Pump inflow tubes or hoses shall be
contained within a 0.5-millimeter mesh-screened cage to exclude aquatic wildlife that may
otherwise be harmed in the process.

42. Any equipment or structures placed in the active channel for water drafting, pumping or
diversion shall be done in a manner that a) prevents pollution and/or siltation, b) provides flows
to downstream reaches at all times to support aquatic life; c) provides flows of sufficient quality
and quantity, and of appropriate temperature to support aquatic life, both above and below the
diversion; and d) restores normal flows to the affected stream immediately upon completion of
work at each location.
43. Any dewatering activities shall be done in a manner that prevents pollution and/or siltation of downstream reaches. Infiltrating groundwater removed from excavations shall be pumped upstream to a temporary sediment basin before discharging into the stream channel. The temporary sediment basin may be constructed of hay bales bound together by baling wire and an impermeable base, or by other means equally as effective and with prior approval from the Department. Water from the temporary sediment basin shall be discharged in a manner as to not cause erosion of the streambed.

Fish Passage and Sufficient Downstream Flow

44. When any artificial obstruction is being constructed, maintained, or placed in operation, within the active channel, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the obstruction pursuant to Fish and Game Code Section 5937.

45. Artificial obstructions placed within the stream shall not represent a barrier to the natural movement of fish pursuant to Fish and Game Code Section 5948. If the Department determines installed structures are not providing adequate passage the Operator shall make any and all necessary modifications to correct the problem.

Structures

46. The Operator confirms that all structures and other constructed features shall be properly aligned and otherwise engineered, installed, and maintained, to assure resistance to washout, and to erosion of the stream bed, stream banks and/or fill and that they will not cause long-term changes in water flows that adversely modify the existing upstream or downstream stream bed/bank contours or increase sediment deposition.

Fill/Spoil

47. Spoil storage sites shall not be located within the stream, where spoil will be washed into the stream, or where it will cover aquatic or riparian vegetation.

48. Only on-site materials and clean imported fill shall be used to complete the Project. Fill shall be limited to the minimal amount necessary to accomplish the agreed activities. Excess fill material shall be moved off-site at Project completion.

Restoration

49. Restoration shall commence immediately upon completion of proposed structure installation activities. All areas temporarily disturbed shall be returned to pre-Project conditions, including original grade and substrate composition.

50. Project generated material and debris shall be removed from the Project site immediately upon Project completion. All Project generated debris shall be disposed of in a legal manner.
51. Restoration shall include the revegetation of all disturbed soils and new fill, including recontoured slopes and all other cleared areas, with riparian vegetation or other plants as appropriate. The Operator shall develop a Revegetation Plan for the site and submit it to the Department for approval prior to commencement of the proposed work. The Plan shall include:

- Compensation for removed trees by:
  - Identifying species damaged or removed during Project activities
  - Describing, how, where, and when replacement shrubs and trees will be planted
    - Riparian trees (i.e., willow, cottonwood, poplar, alder, ash, etc.) and shrubs shall be replaced in-kind and on-site, at a ratio of 4:1, and planted in the nearest suitable location to the area where they were removed
    - Oaks having a DBH of greater than four (4) inches shall be replaced in-kind, at a ratio of 3:1, and planted during the winter dormancy period in the nearest suitable location to the area where they were removed
  - Proposing measures to be taken (i.e., irrigation methods if necessary, and maintenance) to ensure a performance criteria of 70 percent survival of planted trees for a period of three (3) consecutive years, and an additional two (2) years without assistance

- Seeding and mulching exposed slopes, or stream banks not revegetated with riparian shrubs or trees, with a blend of a minimum of three locally native grass species
  - One or two sterile nonnative perennial grass species may be added to the seed mix provided that amount does not exceed 25 percent of the total seed mix by count
  - Locally native wildflower and/or shrub seeds may also be included in the seed mix
  - Seeding shall be completed as soon as possible, but no later than November 15 of the year construction ends

52. A seed mixture shall be submitted to the Department for approval prior to application. At the discretion of the Department, all exposed areas where seeding is considered unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.

53. Where suitable vegetation cannot be reasonably expected to become established, non-erodible materials shall be used for such stabilization. Any installation of non-erodible materials not described in the original Project description shall be coordinated with the Department. Coordination may include the negotiation of additional Agreement Provisions for this activity.

54. Operator shall submit annually a Restoration Monitoring Report as described in the MRP below.

MONITORING AND REPORTING PROGRAM (MRP):

PURPOSE OF THE MRP

The purpose of the MRP is to ensure that the protective measures required by the Department are properly implemented, and to monitor the effectiveness of those measures.
OBLIGATIONS OF THE OPERATOR

The Operator shall have primary responsibility for monitoring Project compliance and
effectiveness of all protective measures included as “Provisions” in this Agreement. Protective
measures must be implemented within the time periods indicated in the Agreement and as
described below.

The Operator shall submit the following to the Department:

- Construction/work schedule (Provision 2)
- Revegetation Plan (Provision 51)
- Seed mixture to be used to control erosion (Provision 52)
- Restoration Monitoring Report shall be submitted to the Department in December of each
  year until the performance criteria described in the Revegetation Plan is met. The report
  shall assess the revegetation status, effectiveness of maintenance methods, whether or not
  the revegetation is expected to achieve the performance criteria, and shall propose
  additional measures that will be taken to achieve the performance criteria during the next
  year. Photo documentation for each year shall be part of the annual reports (Provision 54).
- A Final Project Report submitted within 30 days after the Project is completed. The final
  report shall summarize the Project construction, including any problems relating to the
  protective measures of this Agreement. “Before and after” photo documentation of the
  Project site shall be required.

In addition to the above monitoring and reporting requirements, the Department requires as part
of this MRP that the Operator:

- Immediately notify the Department in writing if monitoring reveals that any of the
  protective measures were not implemented during the period indicated in this program, or if
  it anticipates that measures will not be implemented within the time period specified.
- Immediately notify the Department if any of the protective measures are not providing the
  level of protection that is appropriate for the impact that is occurring, and
  recommendations, if any, for alternative protective measures. This includes any erosion
  detected in the Project area.

VERIFICATION OF COMPLIANCE:

The Department shall verify compliance with management compliance measures to ensure the
accuracy of the Operator’s monitoring and reporting efforts. The Department may, at its sole
discretion, review relevant Project documents maintained by the Operator, interview the
Operator’s employees and agents, inspect the Project area, and take other actions to assess
compliance with or effectiveness of management compliance measures for the Project.
CONCURRENCE:

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME

on __________, 2008.

[Signature]
W. E. Loudermilk, Regional Manager
Central Region

ACKNOWLEDGMENT

The undersigned acknowledges receipt of this Agreement and, by signing, accepts and agrees to comply with all terms and conditions contained herein. The undersigned also acknowledges that adequate funding shall be made available to implement the measures required by this Agreement.

By: Douglas Poochigian, P.E. [Signature]
Doug Poochigian
Monterey County Department of Planning and Public Works

Date: 10-31-2008

Agreement No. 2004-0216-B3
Doug Poochigian – County of Monterey
Carmel River – Monterey County
Regulatory Division

JUN 11 2008

SUBJECT: File Number 2000-249060S

Mr. Douglas Poochigan
County of Monterey
Department of Public Works
168 West Alisal Street, 2nd Floor
Salinas, California 93901

Dear Poochigan:

This letter is written in response to your submittal of November 14, 2007, requesting Department of the Army authorization to replace the existing one-lane Schulte Road Bridge with a two-lane bridge. The proposed project is located at the Schulte Road crossing of the Carmel River in Monterey County, California (Lat: 36.525/Long: -121.831).

This project was previously authorized in 2004. The project consists of construction of a two-lane bridge, on the same alignment as the existing bridge, which will replace the existing one-lane bridge. The replacement bridge will be 206 feet long and 31.5 feet wide. The bridge will be designed to accommodate two travel lanes, one 12 foot wide lane in each direction, and a 5-foot wide pedestrian sidewalk on one side of the bridge. The bridge structure will have two spans supported by double circular piers (in line, one behind the other), located at the center of the bridge structure. Speed bumps will be installed in the road at each end of the bridge to reduce travel speeds for vehicles.

Because the replacement bridge will be constructed along the same alignment as the existing bridge, the project will be phased over a two-year period. In order to maintain vehicle access to the residential neighborhood, one lane of the replacement bridge will be constructed adjacent to the existing bridge during the first year of construction. During the second year of construction, the second lane of the replacement bridge will be constructed. When lane one of the replacement bridge is complete and open to traffic, the existing bridge will be demolished. Construction phasing is necessary since construction activities are restricted to the months of June 1 through October 31 in the Carmel River, and vehicle access to the community must be maintained.

Construction activities for the replacement bridge will result in the removal of 0.23 acre of riparian vegetation that occurs on the river banks, and 0.06 acre of upper floodplain riparian vegetation located near the new bridge approaches. Bridge replacement activities (pier installation and rock slope protection (RSP) placement) will result in a total of 0.02 acre of permanent fill in the bed of the Carmel River: installation of two back-to-back pier structures
will result in the permanent fill of approximately 25 square feet of jurisdictional streambed; and installing RSP around the existing bridge abutment near the west bank will result in the permanent fill of approximately 0.02 acre of jurisdictional streambed. Removing the existing bridge structure, including three existing pier structures from the old bridge currently residing in jurisdictional waters will remove approximately 0.02 acre of permanent fill from jurisdictional areas.

A total of approximately 0.6 acre of temporary impacts within waters of the United States is expected from construction equipment access, installation of the cofferdams, silt catchment basins, and temporary bridge placement. These activities are necessary to reduce potential adverse affects upon water quality and aquatic resources (i.e. erosion, sedimentation, and turbidity) generated by the construction of the proposed project. All temporary impacts will be limited to the minimum area necessary to construct the project. All portions of the Carmel River that are temporarily impacted will be restored to pre-project conditions.

Based on a review of the information you submitted and an inspection of the project site conducted by Corps personnel on July 1, 2003, your project qualifies for authorization under Department of the Army Nationwide Permit 14 – Linear Transportation Projects (72 Fed. Reg. 11092, March 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). See Enclosure 1. All work shall be completed in accordance with the plans and drawings titled “USACE File #2000-249060S, Schulte Road Bridge Replacement” and dated June 9, 2008.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification or revocation of the authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

To ensure compliance with this Nationwide Permit authorization, the following special conditions shall be implemented:
1. This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit or a Biological Opinion (BO) under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service (FWS) BO dated September 19, 2002, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The FWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

2. All standard Best Management Practices shall be implemented to prevent the movement of sediment downstream. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the waterways.

3. Bare areas along the stream banks that are created by the removal of vegetation shall be revegetated with an erosion control seed mix prior to October 15 of the construction year. The seed mix should be compatible with the riparian revegetation plan; the use of crop barley is recommended, as this species will provide temporary erosion control, yet will not adversely affect the riparian revegetation efforts. Bare areas created by the removal of ruderal vegetation shall be revegetated prior to October 15 in each construction year with an erosion control mix to prevent erosion and sedimentation.

4. Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the river. If the channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. If the riverbank has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the riverbed shall be as nearly as possible the same gradient as existed prior to disturbance.

5. Embankment areas, while being brought up to grade and during periods of completion prior to final roadbed construction, shall be protected by various measures to eliminate erosion and the siltation of downstream facilities and adjacent areas. These measures
may include, but shall not be limited to: temporary downdrains, either in the form of pipes or paved ditches with protected outfall areas; graded berms around areas to eliminate erosion of embankment slopes by surface runoff; confined ponding areas to desilt runoff; and temporary check dams in toe of slope ditches to desilt runoff.

6. A post construction report shall be submitted 45 days after the conclusion of construction activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photos.

Should you have any questions regarding this matter, please call Holly Costa of our Regulatory Division at (415) 503-6780. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

[Signature]
Jane M. Hicks
Chief, Regulatory Division

Enclosures

Copies furnished (w/o enclosures):

US FWS, Ventura, CA
US NMFS, Santa Rosa, CA
CA RWQCB, San Luis Obispo, CA
14. **Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

**Note:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).
Enclosure 2

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee’s expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work therein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting the flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
11. **Equipment**: Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls**: Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. **Removal of Temporary Fills**: Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance**: Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. **Wild and Scenic Rivers**: No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. **Tribal Rights**: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. **Endangered Species**: (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification of the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species specific regional endangered species conditions to the NWP. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.htm respectively.

18. **Historic Properties**: (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow
their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officers, as appropriate, and the National Register of Historic Places (see 33 CFR 300.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 38 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. (e) Prospective permittees should be aware that section 110(k) of the NHPA (16 U.S.C. 470k-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (AHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters: Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation: The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project specific waiver of this requirement. For wetland losses of 1/10 acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects to the aquatic environment. Since the likelihood
26. Compliance Certification. Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity: (1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause adverse effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(1)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(2)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedures set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision); (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate; (5) If the proposed activity will result in the loss of greater than ½ acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act and (7): For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.
Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act. (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project’s adverse environmental effects to a minimal level. (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 1/10-acre of wetlands of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or facsimile the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies’ concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 306(c)(6) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination. (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS. (e) District Engineer’s Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal. In determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant’s submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.
25. Single and Complete Project: The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
Enclosure 3

Permittee: Mr. Douglas Poochigian, County of Monterey, Department of Public Works

File Number: 2000-249060S

Certification of Compliance for Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

(Permittee)

(Date)

Return to:

Holly Costa
U.S. Army, Corps of Engineers
San Francisco District
Regulatory Division, CESPN-OR-R
1455 Market Street
San Francisco, CA 94103-1398
May 27, 2004

Doug Poochigian
Monterey County Department of Public Works
312 E. Alisal Street
Salinas, CA 93901

Dear Mr. Poochigian:

WATER QUALITY CERTIFICATION FOR SCHULTE ROAD BRIDGE REPLACEMENT PROJECT, MONTEREY COUNTY

Thank you for the opportunity to review your completed April 2, 2004 water quality certification application for the Schulte Road Bridge Replacement project. The project, as described by your application, appears to protect beneficial uses of State waters. A letter, attached, is enclosing the enclosed Standard Letter of Certification.

Pursuant to California Code of Regulations Section 3857, you should take no further action on your application. We anticipate no further regulatory involvement. Should new information come to our attention that indicates a water quality problem, we may issue Waste Discharge Requirements.

If you have questions please contact Mike Lowther at (805) 549-3876 or via e-mail at mlowther@cb3.swrcb.ca.gov.

Sincerely,

[Signature]
Roger W. Briggs
Executive Officer

Enclosure: Standard Letter of Certification

*Please review the attached certification.*

California Environmental Protection Agency

Recycled Paper

[Attachment: Letter]
Mr. Poochigian

Co: Enclosures:

Timothy Lacy
LSA Associates, Inc.
157 Park Place
Pt. Richmond, CA 94801

U.S. Army Corps of Engineers, San Francisco District:
Regulatory Section
333 Market Street
San Francisco, CA. 94105-2197

401 Program Manager
State Water Resources Control Board
Division of Water Quality, Water Quality Certification Unit
1001 "I" Street
Sacramento, CA 95812-0100

California Department of Fish and Game
Lake and Streambed Alteration Program
Post Office Box 47
Yountville, CA 94599

Tim Vendlinski, Supervisor
Wetlands Regulatory Office (WTR-8)
U.S. Environmental Protection Agency
75 Hawthorne St.
San Francisco, CA 94105

May 27, 2004
<table>
<thead>
<tr>
<th>Application Date</th>
<th>Completed On: April 2, 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant</td>
<td>Doug Poochigian – Monterey County, Department of Public Works</td>
</tr>
<tr>
<td>Applicant</td>
<td>Timothy Lacy – LSA Associates, Inc.</td>
</tr>
<tr>
<td>Project Name</td>
<td>Schulte Road Bridge Replacement</td>
</tr>
<tr>
<td>Regional Board</td>
<td>N/A</td>
</tr>
<tr>
<td>Application Number</td>
<td>Bridge Replacement</td>
</tr>
<tr>
<td>Project Location</td>
<td>South of the City of Monterey Township 16 South, Range 1 East</td>
</tr>
<tr>
<td>County</td>
<td>Monterey</td>
</tr>
<tr>
<td>Receiving Water(s)</td>
<td>Carmel River 307.00 Carmel River Hydrologic Unit</td>
</tr>
<tr>
<td>Water Body Type</td>
<td>River</td>
</tr>
<tr>
<td>Designated Beneficial Uses</td>
<td>Municipal and Domestic Supply Agricultural Supply Industrial Service Supply Ground Water Recharge Water Contact Recreation Non-Contact Recreation Wildlife Habitat Cold Fresh Water Habitat Warm Fresh Water Habitat Migration of Aquatic Organisms Spawning, Reproduction, and/or Early Development Preservation of Biological Habitats of Special Significance Rare, Threatened, or Endangered Species Fresh Water Replenishment Commercial and Sport Fishing</td>
</tr>
<tr>
<td>Project Description (purpose/goal)</td>
<td>The purpose of the project is to replace the existing one lane bridge with a two lane bridge. The Regional Board understands that the project includes the following: • Construction phasing of the bridge over a two year period. • Rock slope protection will be placed around the new bridge abutments on both banks of the river.</td>
</tr>
<tr>
<td>Preliminary Water Quality Concerns</td>
<td>The Water Board is concerned about the release of pollutants during construction activity as well as river bank erosion.</td>
</tr>
<tr>
<td>Proposed Mitigation to Address Concerns</td>
<td>Mitigations proposed by Monterey County of Public Works are as follows: • Construction activities in the Carmel River shall only take place during the dry season (April 15 to October 15). • All trash shall be properly contained; removed from the work site, and disposed of regularly. • All fueling and maintenance of vehicles and other equipment, and staging areas, shall occur at least 66 feet from any riparian habitat or</td>
</tr>
</tbody>
</table>
Prior to the onset of work, the permittee shall prepare a water quality management plan to allow a prompt and effective response to any accidental spills.

The number of access routes, number and size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project goal.

Any fill for the channel crossing or diversion will be "clean river-run gravel".

Sludge water pumped from the construction site (if sludge pumping is required) shall be dumped into a sludge pond outside of the active channel and not into the channel downstream of the site.

Contour grading areas shall be protected against erosion to prevent siltation of downstream facilities and adjacent areas during grading operations.

During demolition and construction, all water shall be diverted around the work area. When work in a flowing channel is unavoidable, the entire stream flow shall be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream passage of fish.

If operations require moving equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, contractors shall install a bridge or culvert to prevent construction equipment from operating in a flowing stream.

Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times.

Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter the river.

Riparian vegetation adjacent to the construction area shall be fenced with protective fencing to preclude inadvertent damage from heavy equipment.

The placement of a filter fabric dam downstream of the construction site would reduce most of the turbidity caused by construction activity. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential.

No debris, soil, silt, sand, slash, sawdust, rubbish, cement or concrete, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the river.

The top of the pile cap shall be placed below the level of the computed 100 year pier scour.

The abutments shall be protected to maintain the channel configuration adjacent to the abutments. Protection should be provided to the level of...
### Project Information (cont'd)

| **Area of Disturbance** | Approximately 0.83 acres  
Streambed: 0.02 acres permanent, 0.55 acres temporary  
Riparian: 0.23 acres temporary  
Wetland: 0.03 acres temporary |
<table>
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</thead>
<tbody>
<tr>
<td><strong>Fill/Excavation Area</strong></td>
<td>Approximately 0.02 permanent fill</td>
</tr>
<tr>
<td><strong>Dredge Volume</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>
| **U.S. Army Corps of Engineers Permit No** | 14 Linear Transportation Projects  
33 Temporary Construction, Access and Dewatering |
| **Federal Public Notice** | N/A |
| **Dept. of Fish and Game Streambed Alteration Agreement** | Streambed Alteration Agreement is pending. Final, signed copy will be forwarded immediately upon execution. |
| **Possible Listed Species** | California red-legged frog, Steelhead trout, willow flycatcher |
| **Status of CEQA Compliance** | EIR  
Lead Agency: County of Monterey |
| **Compensatory Mitigation** | The Regional Board understands that the project includes the following:  
- Wetland: 0.03 acres shall be restored to pre-construction conditions.  
- Streambed: 0.55 acres shall be restored to pre-construction conditions.  
- Impacted riparian habitat shall be replaced at a 3:1 ratio.  
- Cottonwood willow riparian forest habitat shall be replaced at a ratio of 3:1. |
| **Application Fee Provided** | $500 |

### Other

1. Contact Regional Board staff when project begins to allow for visit to project site  
2. Submit a project completion report that contains summary of daily activities, monitoring observations, problems incurred and actions taken; post-project photos properly identified, within 30 days of construction completion.  
3. Submit a signed, final copy of the Department of Fish and Game's streambed alteration agreement will be forwarded to our office immediately upon execution. Document must be submitted prior to any discharge to waters of the State.  
4. Submit annual reports complete with photos of revegetation efforts by December 31 of each monitoring year.  
5. The site shall be monitored (at least one river reach upstream and downstream) after completion of the project and annually for two subsequent rainy seasons to ensure that the new structure is not causing problems with erosion. Monitoring results shall be forwarded to our office within 30 days of completion. If the new project does cause such problems, the applicant shall contact the Regional Board staff overseeing the project. The applicant shall be responsible for obtaining necessary permits and creating and implementing plans for restoration and preventing further problems with erosion.
Michael G. Ritchie, Division Administrator  
California Division  
Federal Highway Administration  
980 Ninth Street, Suite 400  
Sacramento, California 95814-2724

September 19, 2002

Subject: Biological Opinion for the Schulte Road Bridge Replacement Project (Carmel River), Monterey County, California (L-8-02-F-18)

Dear Mr. Ritchie:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion on the effects of the proposed replacement of the Schulte Road bridge over the Carmel River, Monterey County, California on the federally threatened California red-legged frog (Rana aurora draytonii). The Federal Highway Administration (FHWA) will fund 80 percent of the bridge replacement project and the Monterey County Department of Public Works (County) will fund the remaining portion of the project. Your request for consultation, dated January 3, 2002, was received by our office on January 7, 2002.

This biological opinion is based on the following sources of information:

1. A Draft Final Focused Environmental Impact Report that describes the configuration and proposed installation of the proposed replacement bridge, and minimization and avoidance measures that will be implemented to reduce potential environmental impacts that are associated with the project (LSA 2002b).

2. A supplemental biological impact analysis related to the Schulte Road Bridge replacement (LSA 2001a).

3. A document that describes the potential effects of the proposed project on California red-legged frogs (LSA 2001b).

4. A Schulte Road bridge replacement biological impact analysis (HRG 1997).

5. Discussions with Ms. Dawn Reese, who is a private consultant. Ms. Reese has extensive
5. Discussions with Ms. Dawn Reese, who is a private consultant. Ms. Reese has extensive knowledge of California red-legged frogs in the Carmel River valley.

6. Written and oral communications between the Service, FHWA and County staff, and employees from the California Department of Transportation.

A complete administrative record for this biological opinion is on file at the Ventura Fish and Wildlife Office.

CONSULTATION HISTORY

On March 2, 2000, the FHWA requested initiation of formal consultation pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act). The request involved the replacement of the Schulte Road Bridge. The correspondence that was submitted in the March 2000 transmittal did not contain a description of the action being considered, and the biological survey data provided in the consultation request was three years old. On January 3, 2002, FHWA sent the Service a detailed project description (LSA 2002a), a supplemental biological analysis (LSA 2001a), a synopsis of potential project-related effects pertaining to California red-legged frogs (LSA 2001b), and other relevant documents and analyses related to the project. On March 22, 2002, biologist Doug Thrall of the Service met with Mr. Doug Poonchigian from the Monterey County Department of Public Works at the Schulte Road Bridge project site. Mr. Poonchigian indicated at that time that the final project design for the bridge replacement would not be determined until the Monterey County Board of Supervisors certified a final Environmental Impact Report, and that the bridge configuration and installation described in the January 2002 Draft Focused Environmental Impact Report could change due to concerns that were being expressed by local residents. On July 11, 2002, LSA Associates sent the Service a Draft Final Focused Environmental Impact Report (LSA 2002b) with a revised bridge design. The bridge configuration described in Draft Final Environmental Impact Report is the basis for the analysis contained within this biological opinion.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The existing Schulte Road bridge that crosses the Carmel River is 54 years old; is one lane wide; does not meet California Department of Transportation seismic and structural standards for bridges or American Association of Safety and Highway Transportation Officials geometric standards for rural roadways; and is not rated to carry heavy loads such as firefighting equipment or other heavy equipment that may be needed in the event of an emergency. The existing bridge possesses two vertical supports that are located in the active stream channel. The bridge is located halfway between Carmel Valley Village and state Highway 1. The road that crosses the bridge ends less than a mile from the bridge, and the road only provides access to 73 residences and a recreational vehicle park.
The proposed project is described as follows:

1. The existing one lane bridge will be replaced with a new two lane bridge.

2. The new two lane replacement bridge will be constructed on the same alignment as the existing one lane bridge.

3. The bridge will be designed to accommodate two travel lanes (one 12 foot wide lane in each direction) and a 5-foot wide pedestrian sidewalk on one side of the bridge. The pedestrian sidewalk will be separated from the vehicle travel lanes by a type 215 bridge barrier. The total bridge width will be a maximum of 31 feet.

4. The bridge structure will have two spans supported by two circular piers located at the center of the bridge structure. The footings of these piers will be placed in the active stream channel.

5. Speed bumps will be installed in each direction prior to the bridge to reduce travel speeds for vehicles.

Prior to the start of construction, all water shall be diverted around the work area by installing gravel or sheet metal cofferdams. Coincident with this activity, silt catchment basins (desilting basins) will be installed upstream and downstream of the construction/demolition area. The silt catchment basins will be used to divert and contain storm runoff that may develop as work is conducted. If necessary, a temporary construction bridge will be created to facilitate equipment access from the river bank to the stream bed. Vegetation removal will occur at and adjacent to the bridge abutments that are present on the banks on either side of the river and under the two vertical support piers under the bridge. This activity will result in the removal of 0.23 acres of riparian vegetation that occurs on the river banks, including 0.06 acres of upper floodplain riparian vegetation located near the new bridge abutments and an estimated 0.03 acres of vegetation located below the ordinary high water mark (LSA 201b). After the bridge replacement process is complete, the cofferdams, silt catchment basins, material collected by the catchment basins, and the temporary bridge (if installed) will be removed from the project site. The river bed gradient will then be returned to its original gradient.

For the purposes of this biological opinion, the action area encompasses the area bounded by a 200-foot radius centered at the existing bridge. This area includes the maximum extent of habitat that is likely to be affected by activities that will alter vegetation or soil substrates.

Construction phasing of the bridge over a two year period will be necessary; various portions of the project will be completed between April 1 and November 1 in 2003 and 2004. To maintain vehicle access to the residential homes and RV park, one lane of the replacement bridge will be constructed adjacent to the existing bridge during the first year of construction. As a result, the existing bridge will remain open to traffic until the first lane of the replacement bridge is
completed. During the second year of construction, the second lane of the replacement bridge will be constructed. When lane one of the replacement bridge is completed and open to traffic, the existing bridge will be demolished, and the old bridge components will be discarded in a certified landfill.

The FHWA and the County have incorporated measures into the project design to minimize adverse effects to California red-legged frogs and aquatic and riparian habitat that occur in the local area. These measures address potential effects related to hydrology, water quality, and biological resources, and are described as follows:

**Measures to reduce stream turbidity and erosion**

1. Work in the stream channel will be conducted between June 1 and October 31. It is expected that bridge construction activities conducted during this period will occur when river flows are lowest, or when the river bed is dry.

2. To control erosion during and after construction, the permittee shall implement best management practices, as identified by the Regional Water Quality Control Board.

3. Prior to construction activities, County staff shall prepare an effective erosion and sedimentation control plan that will minimize erosion and sedimentation effects. The erosion plan shall be developed and approved by the Service prior to initiation of any construction activities. The approved erosion control plan will be implemented during the construction activities.

4. To prevent turbidity and sedimentation during construction, cofferdams with by-pass flows to either a channel or a culvert shall be installed both upstream and downstream of the construction zone. The cofferdams will be constructed of clean river-run gravel.

5. If sludge pumping is required, sludge water will be pumped into a sludge pond outside of the active channel.

6. Contour grading areas shall be protected against erosion to prevent siltation of downstream areas.

7. If operations require moving equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the contractor shall install a temporary bridge or culvert to prevent construction equipment from operating in a flowing stream.

8. Silt catchment basins shall be constructed downstream immediately below the project area prior to diverting stream flow or commencing any other work. Water containing silt or wash water shall be diverted into the silt catchment basins.
The contractor shall conduct his operations in such a manner that storm runoff will be contained within the project area or channeled into the silt catchment basin system that serves the runoff area.

Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter the river but will be diverted into the silt catchment or desilting basin system.

The minimum capacity of each desilting basin shall be 50 cubic yards per slope horizontal acre of disturbed ground. After each storm, desilting basins shall be checked against their design capacity and if necessary, silt and sediment shall be removed to restore capacity.

Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the river. If the channel has been altered during the construction operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a wide flat channel or possible future bank erosion problem.

Embankment areas, while being brought up to grade and prior to final roadbed construction, shall be protected by various measures to eliminate erosion and the siltation of downstream facilities and adjacent areas. These measures may include, but shall not be limited to: temporary downspouts, either in the form of piped or paved ditches with protected outfall areas; graded berms around areas to eliminate erosion of embankment slopes by surface runoff; confined ponding areas to desilt runoff, and temporary check dams in toe of slope ditches to desilt runoff.

**Measures to protect upland vegetation**

1. Riparian vegetation adjacent to, but not in, the construction area shall be fenced with protective fencing to preclude inadvertent damage from heavy equipment. Six foot tall plastic mesh fencing shall be placed along the edge of the construction area and adjacent riparian vegetation, and anchored appropriately to prevent movement. The most effective location of the fencing shall be verified by a qualified biologist prior to construction.

2. To compensate for the removal of riparian habitat that results from bridge construction activities, County staff shall replace impacted habitat at a minimum 3:1 ratio with three acres being replaced for every acre that is altered or destroyed. A riparian mitigation plan shall be prepared by a qualified biologist/revegetation specialist and shall specify the techniques necessary to recreate cottonwood-willow riparian forest habitat. The plan shall specify the use of locally obtained native plant propagates for the revegetation effort. The plan will include the location of restored areas, plant species to be used, restoration techniques, time of year work will be done, success criteria for completion,
and remedial actions if the success criteria are not achieved. The plantings shall be monitored and maintained for a minimum of five years until established.

3. In areas where existing bridge piers are removed, the river bed shall be re-contoured to match the elevation of the existing river channel, and the areas will be revegetated with riparian vegetation.

4. Bare areas along the streambanks that are created by the removal of vegetation shall be revegetated with an erosion control seed mix prior to October 15 of the construction year. The seed mix shall be compatible with the riparian revegetation plan and will not adversely affect the riparian revegetation efforts. Bare areas created by the removal of ruderal vegetation shall be revegetated prior to October 15 of each construction year with the erosion control mix to prevent erosion and sedimentation.

Measures to minimize effects to California red-legged frogs

1. At least 15 days prior to construction, the permittee shall submit to the Service a list of names and credentials of biologists who would conduct the activities specified in the following measures.

2. Work activities shall be completed between April 1 and November 1 each year. If it is necessary to conduct work activities outside this time period, prior authorization must be obtained from the FHWA, with the Service’s approval. Work activities in the riparian areas shall be completed between June 1 and October 31.

3. A Service-approved biologist shall survey the work site two weeks before the onset of work activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine whether moving any of these life stages is appropriate. If the Service approves moving the California red-legged frogs, the approved biologist shall be allowed sufficient time to move them from the work to an approved relocation site before work activities begin.

4. A Service-approved biologist shall be present at the work site until such time as removal of all California red-legged frogs (if required) and instruction of workers has been completed. After this time, the contractor shall designate a monitor that will ensure on-site compliance with all minimization measures when the biologist is absent. The Service-approved biologist shall ensure that the monitor is familiar with the minimization measures and is able to identify California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the FHWA and Service. If work is stopped, the FHWA and Service shall be notified immediately by the biologist or on-site monitor.
5. Before construction begins, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat; the importance of the animal and its habitat; the general measures that are being implemented to minimize impacts to the California red-legged frog; and the boundaries within which the workers and equipment must remain.

6. All fueling and maintenance of vehicles and other equipment shall occur at least 66 feet from any riparian habitat or water body. The permittee shall ensure that contamination of riparian habitat does not occur during such operations. Prior to the onset of work, the permittee shall prepare a water quality management plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to be taken should a spill occur.

7. Stream contours shall be restored to their original condition at the end of the project, unless consultation with the Service has determined that it is not beneficial to the California red-legged frog or feasible.

8. The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated.

9. The Service-approved biologist shall permanently remove individuals of exotic species such as bullfrogs, crayfish, and centrarchid fishes from the project area to the extent possible.

10. No debris, soil, silt, sand, bark slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the river. When operations are completed, any excess materials or debris shall be removed from the work area. No trash or rubbish shall be deposited within 150 feet of the high watermark of the river. Debris, litter, construction material, etc. shall not be allowed to drift from the work area and shall be cleaned up daily.

STATUS OF THE SPECIES

On May 23, 1996, the Service published a final rule to list the California red-legged frog as threatened. Information contained in this account was obtained primarily from the final rule for listing as threatened (61 Federal Register 25813), Hayes and Jennings (1988), and Jennings and Hayes (1985).
The California red-legged frog is one of two subspecies of the red-legged frog (*Rana aurora*) found on the Pacific Coast. The historical range of the California red-legged frog extended from the vicinity of Point Reyes National Seashore, Marin County, California, coastally and from the vicinity of Redding, Shasta County, California, inland southward to northwestern Baja California, Mexico.

The California red-legged frog occupies habitat that combines both specific aquatic and riparian components. The adults are typically found in dense, shrubby or emergent riparian vegetation closely associated with deep (more than two feet in depth) still or slowly moving water. They breed and migrate from November through March and into spring depending on rainfall, although earlier breeding has been recorded in the southern part of their range. Female California red-legged frogs deposit egg masses on emergent vegetation, floating on the surface of the water. Egg masses contain about 2,000 to 5,000 moderate-sized (0.08 to 0.11 inch in diameter), dark reddish-brown eggs. Eggs hatch in six to 14 days. Larvae undergo metamorphosis 3.5 to seven months after hatching. California red-legged frogs normally reach sexual maturity at three to four years of age. Individuals may live eight to ten years.

Juvenile and adult California red-legged frogs have been observed in areas of riparian vegetation where they may use small mammal burrows, moist litter, and debris such as old boards. Radio telemetry studies showed that individual California red-legged frogs move within the riparian zone from vegetated areas to pools. During wet periods (particularly winter and spring), California red-legged frogs may move long distances between aquatic habitats, often traveling through habitats considered to be unsuitable for frogs. California red-legged frogs have been found more than one mile from breeding habitat and may reach isolated aquatic habitats up to a mile away from the nearest known California red-legged frog populations.

The diet of California red-legged frogs is highly variable. Larvae probably eat algae. Invertebrates are the most common food item for adults. Vertebrates, such as Pacific treefrogs (*Hyla regilla*) and California mice (*Peromyscus californicus*), represented over half of the prey mass eaten by larger individuals. Juveniles are active diurnally and nocturnally, whereas adults are largely nocturnal. Feeding activity probably occurs along the shoreline and on the surface of the water.

Habitat loss and alteration, combined with over-exploitation and introduction of exotic predators, were important factors in the decline of the California red-legged frog in the early to mid-1900s. Habitat loss and degradation continue to threaten California red-legged frogs where agriculture and urbanization are found within their range. Road maintenance projects, off-road vehicle use, and livestock grazing contribute to erosion of stream banks and siltation of streams where California red-legged frog eggs can be smothered. Siltation that occurs during the breeding season can lead to asphyxiation of eggs resulting in small California red-legged frog larvae (Sam Sweet, pers. comm., 1993). Exotic predators like the bullfrog (*Rana catesbeiana*), catfish (*Ictalurus spp.*), bass (*Micropterus spp.*), mosquitofish (*Gambusia affinis*), red swamp crayfish (*Procambarus clarkii*), and signal crayfish (*Pacificastacus leniusculus*) were introduced into the...
1800s to 1900s, and prey on at least one life stage of the California red-legged frog. Raccoons (Procyon lotor) are known to depress California red-legged frog populations and are often associated with rural developments. The most important mortality factor in the pre-hatching stage is water salinity. On the central California coast, drought may also play a role in decreased reproduction where California red-legged frogs occur in coastal lagoons. High salinity in lagoons can be attributed to drought in many instances.

ENVIRONMENTAL BASELINE

The Carmel River channel at the bridge site is approximately 180 feet wide between the top of banks and 140 feet wide between the ordinary high water marks. The stream channel bottom in the vicinity of the bridge is composed of gravel and cobblestones with sandy soil along the banks. The river bottom has very little silt or sediment along this reach of the river. Water levels in the river channel in 2001 were relatively shallow (4-10 inches deep) during the summer months (LSA 2001b), although deeper pools could be infrequently present. During low flow conditions (summer and fall), water velocity near the project site slows in deeper pools and has the potential to provide good cover for adult and juvenile frogs (LSA 2001a). Stream flow varies seasonally and is typically slow flowing and shallow during the summer months. Flowing surface water may be altogether lacking at the bridge site in low precipitation years.

In 1997, staff from the Habitat Restoration Group identified three predominant plant communities in and adjacent to the proposed project area. These consisted of cottonwood-willow (Populus spp. - Salix spp.) riparian forest, freshwater marsh, and ruderal vegetation (HRG 1997). Additional surveys in August 2000 indicated that these vegetation types were still present at that time (LSA 2001a). The 2000 surveys determined that cottonwood-willow riparian vegetation dominated the banks of the river as well as the gravel bar located upstream of the bridge. Masses of roots extend into the stream channel along the north bank, and provide potential cover for adult and larval frogs. Adjacent upland areas within the construction limits for the project consist primarily of residential housing units, paved roads and ornamental plantings. Emergent vegetation in the stream channel is limited to a few patches along the banks. The lower stream bank is dominated by a riparian forest containing cottonwoods and willows planted in 1996/97 and 1987/88 by the Monterey Peninsula Water Management Department as part of its restoration and streambank stabilization project.

California red-legged frogs were observed 0.5 miles upstream of the Schulte Road bridge in 1996 (Neddeff, pers. comm., in HRG 1997). The California Natural Diversity Database contains documented occurrences of the California red-legged frog within a 1.5 to 6 mile radius of the project site (CNDDB 2000). In July of 2002, California red-legged frog juveniles and tadpoles were observed 150 feet downstream of the bridge in the river channel (Roeser, pers. comm., 2002). Collectively, these observations suggest that California red-legged frogs are likely to occur at or immediately adjacent to the bridge site during all or a significant portion of the calendar year. Crayfish (Astacus sp.) and bullfrogs (Rana catesbeiana) are non-native predators that are known to occur in the proposed construction zone.
The proposed project does not occur within California red-legged frog designated critical habitat, but is located within 500 feet of the unit 18 designated critical habitat boundary.

EFFECTS OF THE ACTION

Construction activities could directly affect California red-legged frogs within the project footprint. Construction debris, construction traffic, and worker foot traffic could crush individuals. Such direct mortality and injury would be reduced by the proposed movement of California red-legged frogs out of harm’s way, monitoring of work activities by an ecologist on a daily basis, and providing training to construction personnel regarding identification and habitat requirements of California red-legged frogs. Biologists may not be able to detect and capture all California red-legged frogs in the work area and others may return after work activities have begun. However, because of the protective measures, we anticipate that few adults or metamorphs are likely to be killed in this manner. Given the time of year when the work will be completed, we do not anticipate that egg mass will be impacted.

California red-legged frogs could be injured or killed if they are improperly handled during capture and translocation efforts. Because the FHWA proposes to use only knowledgeable biologists to capture and move California red-legged frogs, we do not anticipate improper handling. Although there is the potential for diminished California red-legged frog survival at translocation sites, the FHWA will minimize this by selecting sites in coordination with the Service, that appear to support the appropriate environmental conditions for California red-legged frogs.

Project activities may also indirectly affect California red-legged frogs inside and outside the project area. Construction may temporarily increase sedimentation downstream from the project site. Increased sedimentation could fill pools which offer cover from predators and appropriate sites for breeding, obscuring aquatic food items, and possibly suffocate or bury eggs and young tadpoles by negatively affecting water quality. However, we do not expect the resulting turbidity to occur at levels higher than those that normally occur in streams during the rainy season due the erosion control measures. During the dry season, project-generated turbidity in the creek is likely to be minimal because water flow will be low or non-existent. In addition, FHWA will ensure implementation of erosion control measures at the time of construction, thereby reducing the likelihood that siltation has the potential to adversely affect the California red-legged frog.

A slight potential exists that reproductive behavior may be impacted if California red-legged frogs are inadvertently captured while they are attempting to find a site to lay eggs. However, project activities would occur between April 1 through November 1, which is during the non-breeding season; therefore, we do not anticipate any disruption of breeding activity.

Predators of California red-legged frogs may be attracted to the project site if food-related items and garbage are accessible. Uninformed workers may intentionally or unintentionally disturb, injure, harm, or kill California red-legged frogs. The proposed worker education program and
the trash and food debris removal measure will likely minimize these effects to California red-legged frogs.

Construction activities for the replacement bridge will result in the removal of 0.23 acres of riparian vegetation that occurs on the river banks, including 0.06 acres of upper flood plain riparian vegetation located near the new bridge abutments and an estimated 0.03 acres of vegetation located below the ordinary high water mark (LSA 2001b). The cottonwood-willow habitat that dominates the bank provides cover for adult and juvenile frogs. Disturbance of habitat may cause the spread or establishment of non-native invasive species, such as giant reed (Arundo donax) or salt cedars (Tamarix spp.). Establishment of non-native vegetation would degrade habitat quality for California red-legged frogs by excluding native plant species and reducing the structural complexity important for sheltering, foraging, and breeding of California red-legged frogs. These effects will be reduced when the project area is revegetated after the construction is complete.

The potential for accidental spills of gasoline during vehicle refueling activities or the release of lubricants from poorly maintained vehicles would be reduced through the implementation of the vehicle fueling and maintenance measures.

Summary

Overall, few California red-legged frogs are likely to be physically injured or killed during construction of the proposed action because the project proponent will conduct surveys to locate California red-legged frogs that may be in the project area, and relocate these animals to other suitable habitat. The proposed action will be implemented during the dry season (April 1 through November 1), riparian systems will be revegetated after the project is complete, and the F.I. will ensure implementation of measures to reduce mortality which we expect will be effective.

The disturbance of 0.23 acres of riparian habitat adjacent to the stream is not likely to permanently disrupt the ability of California red-legged frogs to breed, forage, shelter, and disperse throughout the project area. The proposed bridge reflects an in-kind replacement that is relatively small in its geographic extent.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the project area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.
The Service is unaware of any future non-Federal actions that are reasonably certain to occur in the project area that, when considered with the effects of this consultation on the California red-legged frog, would likely jeopardize the continued existence of this species.

CONCLUSION

After reviewing the current status of the California red-legged frog, the environmental baseline for the project area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the Schulte Road bridge replacement project, as proposed, is not likely to jeopardize the continued existence of this species. We have reached this conclusion for the following reasons:

1. Most California red-legged frogs within the project area, if they are present, will be moved from harm's way prior to construction. The project will be implemented during the non-breeding season; therefore, we expect that few juvenile individuals or tadpoles will be harmed or killed as a result of project activities.

2. Measures will be implemented to reduce the extent of adverse effects to California red-legged frogs and their habitat.

3. The amount of upland habitat that will be permanently/temporarily disturbed constitutes a small portion of habitat for the California red-legged frog in Monterey County and throughout the range of the species. Aquatic and riparian habitat will not be permanently impacted. The number of California red-legged frogs that may be adversely affected constitutes a small fraction of the population within the habitat and throughout the species' range.

4. The proposed action contains measures to restore the existing plant community to its original condition after the bridge replacement is complete.

5. The final Draft Environmental Impact Report that is associated with the bridge replacement project states that it is unlikely that the proposed project will result in an increase in the number of vehicle trips across the river. The proposed bridge replacement is therefore unlikely to induce additional development in the local area.

INCIDENTAL TAKING STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, dispersal, or sheltering. Harass is defined by the
Service as an intentional or negligent act or omission that creates the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(c)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary and the FHWA must make them binding conditions of any authorization issued to the County for the exemption in section 7(c)(2) to apply. The FHWA has a continuing duty to regulate the activity covered by this incidental take statement. If the FHWA and the County fail to adhere to the terms and conditions of the incidental take statement, the protective coverage of section 7(c)(2) may lapse. To monitor the impact of incidental take, the FHWA or the County must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(l)(3)].

We anticipate that the following incidental take may result from the proposed activities analyzed in this document.

All California red-legged frogs in the habitat within a 200-foot radius of the existing Schulte Road bridge may be harassed, killed, or injured as a result of activities associated with construction and translocation activities. Although unlikely, they may also be injured or killed as a result of being driven from suitable habitat in the project area during construction activities. We cannot determine exactly how many California red-legged frogs will be taken; however, because of the nature of the proposed activities, the measures the FHWA has incorporated to reduce incidental take, and implementation of the project during the non-breeding season, we anticipate that up to three California red-legged frogs will be lethally taken.

If more than three California red-legged frogs are killed or injured during implementation of the project, the FHWA or the County shall contact the Service immediately so we can review the project activities to determine if additional protective measures are needed. Project activities may continue during this review period, provided that all proposed protective measures and terms and conditions of this biological opinion have been and continue to be implemented.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the California red-legged frog:
1. Only biologists authorized by the Service shall survey for and capture California red-legged frogs.

2. Surveys shall be conducted for California red-legged frogs that may be present in the project area. Individuals found shall be captured and moved to locations that are outside the project area.

3. Construction personnel shall be trained to monitor the project area for the presence of California red-legged frogs, and the entanglement of California red-legged frogs in construction material shall be avoided.

4. Implement measures to ensure that riparian habitat within and adjacent to the project area is restored.

The Service's evaluation of the effects of the proposed action includes consideration of the proposed measures to minimize the adverse effects of the proposed bridge replacement project to the California red-legged frog that were developed by FHWA and the County and repeated in the Description of the Proposed Action portion of this biological opinion. Any subsequent changes to the measures proposed by FHWA or the County may constitute a modification of the proposed action and may warrant reinitiation of formal consultation, as specified at 50 CFR 402.16. The above reasonable and prudent measures are intended to clarify or supplement the protective measures that were proposed by FHWA and the County as part of the proposed action.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, the FHWA must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measures described above and outlined in the reporting and monitoring requirements. These terms and conditions are non-discretionary.

The following terms and conditions are established to implement reasonable and prudent measure 1:

a. The FHWA or the County shall utilize biologists that have experience surveying, handling, transporting, and transplanting California red-legged frogs.

The following terms and conditions are established to implement reasonable and prudent measure 2:

a. The Service-approved biologist shall identify a minimum of two suitable areas to place relocated California red-legged frogs. These areas shall be reasonably near the capture site; support suitable vegetation and moisture/water regimes; and be free of exotic predatory species to the best of the biologist's knowledge.
b. Each year of construction, and one week prior to the onset of ground disturbing activities, the Service-approved biologist shall conduct surveys for California red-legged frogs within a 200-foot radius of the existing Schulte Road bridge. Two daytime visual surveys shall be conducted on two different days from the banks or within the stream channel where dewatering and construction activities take place. Nighttime surveys by spotlighting shall be conducted on two separate nights with the final night scheduled for the night before the initiation of activities that result in habitat disturbance. Vegetation that will be disturbed by subsequent construction may be removed by hand during these surveys to facilitate finding California red-legged frogs.

1. The immediate project area shall be checked for California red-legged frogs daily, prior to the start of each day’s work for a period of four days. Any individuals found shall be moved to the Service-approved relocation site.

2. If intensified surveys do not detect California red-legged frogs in the work area during four consecutive days of survey work, the surveys may be scaled down to occur once every other week. Any individuals found during scaled-down surveys shall be moved to the Service-approved relocation sites by the approved biologists, and once individuals have been discovered, surveys must revert to the protocol described in term and condition 2.b.1.

c. If any adult California red-legged frog are found within the project area during the surveys described in bullet 2.b, the Service-approved biologist shall capture the animals and release them at the relocation sites described in bullet 2a.

d. All California red-legged frogs found during surveys shall be captured by the authorized biologist by using nets and bare hands.

e. Authorized biologists handling California red-legged frogs shall not use soaps, oils, creams, lotions, repellants, or solvents of any sort on their hands before and during periods when they are capturing and translocating California red-legged frogs.

f. The authorized biologist shall limit the duration of handling and captivity of California red-legged frogs to the minimum necessary to efficiently complete the task of capturing and relocating the animal. While in captivity, California red-legged frogs shall be kept in a cool, moist environment, such as a bucket containing a damp sponge.
If California red-legged frog tadpoles are found in an area that will be affected by project activities, the Service shall be contacted to determine the appropriate course of action.

The following terms and conditions are established to implement reasonable and prudent measure 3:

a. When the Service-approved biologist is not at the project site, a member of the work crew shall be designated to monitor all construction activities to ensure compliance with the terms and conditions of this biological opinion. The designated monitors shall be trained by the authorized biologist to identify California red-legged frogs. The designated monitors shall immediately notify the authorized biologist if California red-legged frogs are discovered by members of the construction crew in the work area. The designated monitors are not authorized to capture or handle California red-legged frogs. The designated monitors shall have the authority to temporarily halt work activities that may injure or kill California red-legged frogs until they have been relocated by the Service-approved biologist.

b. Fencing that is erected to preclude inadvertent damage to riparian vegetation from heavy equipment shall be erected in a manner that does not have the potential to entangle California red-legged frogs. Fencing shall be raised two to four inches off the ground to allow unrestrained movement of California red-legged frogs.

c. The training session that is provided to all of the construction personnel by the Service-approved biologist shall be conducted no sooner than one week prior to the start of construction activities. If construction staff during year two of the project involves individuals that did not receive the training in year one, these new individuals shall receive the training before year two operations begin.

The following terms and conditions are established to implement reasonable and prudent measure 4:

a. Periodic inspections shall be conducted on an annual basis for five years to determine if non-native plant species have colonized the construction area. If these non-native species have the potential to degrade the quality of riparian habitat adjacent to the bridge, staff from the FHWA or the County shall determine if exotic plant eradication activities are warranted.

b. The riparian mitigation plan should describe contingency measures that would be implemented in the event that the site does not become successfully revegetated within a five-year period. If the site is successfully revegetated in less than five
species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

We recommend implementing the following actions:

1. The FHWA should work with the County to develop and implement a long-term program to remove deleterious, non-native animal species found in the project area, such as bullfrogs. These removals must be conducted in a manner that complies with the California Fish and Game Code. We also recommend that the stomach contents of bullfrogs be analyzed to determine whether they are preying on species that are listed as threatened or endangered.

2. Other native amphibians or reptiles found in the project area during work activities should be released unharmed in nearby suitable habitat. If the Service-approved biologist or construction personnel observe Southwestern pond turtles ( Clemmys marmorata ) at the site, it is requested that the Service be notified of their presence in the construction area.

REINITIATION NOTICE

This concludes formal consultation on the effects of your proposed authorization of the proposed replacement of the Schulze Road bridge replacement project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions, please contact Douglas Threlfall of my staff at (805) 644-1766.

Sincerely,

[Signature]

Diane K. Noda
Field Supervisor
REFERENCES CITED


Dear Mr. Richie:

This letter is in response to your request of March 2, 2000 to initiate formal Section 7 consultation with the National Marine Fisheries Service (NMFS) regarding the Monterey County Department of Public Works (MCDPW) proposal to replace the Schulte Road Bridge over the Carmel River. The MCDPW proposes to replace the existing single-lane bridge with a two-lane bridge. The project involves the construction of a new pier in the active stream channel and new chum只有一个能沿岸迁移的水母。To facilitate this work, MCDPW has agreed to place clean river-run gravel along the east bank until the location of the new pier is covered thereby allowing work to be done out of the active flow without dewatering the existing stream channel. In addition, MCDPW has agreed to restore any removed trees at a three-to-one ratio. Work within the active stream channel will only occur between June 1 and October 31.

Following consultation with MCDPW staff and review of the modified project proposal (May 5, 2000), NMFS concurs with your determination that this project, as modified, is not likely to adversely affect steelhead trout (Oncorhynchus mykiss) or critical habitat for this species. This letter concludes informal consultation for the project in accordance with 50 C.F.R. section 402.14(b)(1). However, should changes be incorporated into the project that may alter this determination, additional consultation with NMFS will be necessary.

If you have questions concerning this consultation, please contact Mr. Ronald Smith at (707) 575-6095.

Sincerely,

[Signature]

Rebecca Lent, Ph.D.
Regional Administrator

Printed on Recycled Paper
NOTICE OF DETERMINATION

To:       X Office of Planning and Research
          1400 Tenth Street, Room 121
          Sacramento, CA 95814

          X County Clerk
          Monterey County
          P.O. Box 29
          Salinas, CA 93902

From: Monterey County Public Works
      312 East Alisal Street
      Salinas, CA 93901-4211

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Project Title
Schulte Road Bridge Replacement Focused EIR/EA

State Clearinghouse Number
(Similar to Clearinghouse)
SCH No. 2000101039

Lead Agency
Douglas Poochigian, P.E.
Monterey County

Area Code/Telephone/Extension
831-755-4888

Project Location (include county)
Schulte Road at the Carmel River, located approximately six miles east of State Highway 1 and two miles west of the Mid Valley Shopping Center in Carmel Valley, in Monterey County.

Project Description:
The project consists of construction of a two lane bridge (on the same alignment as the existing bridge) that will replace the existing one lane bridge, which does not meet current seismic, structural, and geometric standards. The bridge will be designed to accommodate two travel lanes (one 12 foot wide lane in each direction) and a 5 foot wide pedestrian sidewalk on one side of the bridge. The pedestrian sidewalk will be separated from the vehicle travel lanes by a type 215 bridge barrier. The total bridge width will be a maximum of 31 feet. The bridge structure will have two spans supported by double circular piers (in line, one behind the other), located at the center of the bridge structure. Speed bumps will be installed in each direction prior to the bridge to reduce travel speeds for vehicles.

This is to advise that the County Board of Supervisors has approved the above described project on July 23, 2002 and has made the following determinations regarding the above described project:

☐ Lead Agency  ☐ Responsible Agency

☐ E. The project will not have a significant effect on the environment.

☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

☐ Mitigation measures were made a condition of the approval of the project.

☐ A Statement of Overriding Considerations was adopted for this project.

This is to certify that the Final Environmental Impact Report with comments and responses and record of project approval is available to the General Public at:

Monterey County Department of Public Works, 312 East Alisal Street, Salinas, CA 93901

Signature (Public Agency) Date Title

Date received for filing at OPR:

Book One 8/19/2011
Schulte Road Bridge
Project No. 382065

267
FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
FOR
Schulte Road Bridge Replacement
Carmel Valley, Monterey County
California

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the environmental assessment.

4/30/2004
DATE

For
Gene K. Fong
Division Administrator
Federal Highway Administration
Sedimentation and Erosion Control Plan

From FEIR/EA for the Schulte Road Bridge Replacement Project, October 2003.
contractor shall install a bridge or culvert to prevent construction equipment from operating in a flowing stream. A temporary bridge for construction equipment to cross the stream should be used or all flow should be diverted through a temporary culvert. See Figure 6.1.

- Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times. The bottom of temporary culverts shall be placed at or below the river channel grade.
Silt Catchment Basins.

- Silt catchment basins shall be constructed downstream immediately below the project prior to diverting the stream flow or commencing any other work. Water containing siltation or wash water shall be diverted into the silt catchment basins. See Figure 6.1.
- The contractor shall conduct his operations in such a manner that storm runoff will be contained within the project or channeled into the storm drain system that serves the runoff area. Storm runoff will be diverted into the silt catchment basin system.
- Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter the river but will be diverted into the silt catchment or desilting basin system. Silt settling basins shall be located away from the river to prevent discolored, silt bearing water from reaching the river. See Figure 6.1.
- When the use of desilting basins is required, the contractor shall include the following information:
  a. A drawing outlining the disturbed area contributing to each proposed desilting basin and indicating the acreage of the disturbed area.
  b. The capacity, in cubic yards, of each desilting basin to be constructed.
- The minimum capacity of each desilting basin constructed shall be 50 cubic yards per slope horizontal acre of disturbed ground. After each storm, desilting basins shall be checked against their design capacity and if necessary, silt and sediment shall be removed to restore capacity.

Fencing.

- Riparian vegetation adjacent to the construction area shall be fenced with protective fencing to preclude inadvertent damage from heavy equipment. Six foot (1.83 meters) tall plastic mesh fencing shall be placed along the edge of the construction area and adjacent riparian vegetation. A silt fence shall be installed along the entire work site separating the work site from the flowing stream. This silt fence shall be checked, repaired and maintained in working condition every morning prior to any other construction activity.
- The placement of straw bales or a filter fabric dam downstream of the construction site would reduce most of the turbidity caused by the construction activity. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on exposed ground surfaces to control erosion.

Revegetation with Erosion Control Seed Mix.

- Bare areas along the streambanks that are created by the removal of vegetation shall be revegetated with an erosion control seed mix prior to October 15 of the construction year. The seed mix should be compatible with the riparian revegetation plan; the use of crop barley is recommended, as this species will provide temporary erosion control, yet will not adversely affect the riparian revegetation efforts. Bare areas created by the removal of ruderal vegetation shall be revegetated prior to October 15 in each construction year with an erosion control mix to prevent erosion and sedimentation.

Removal of Debris Within the Streambed.

- No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be
washed by rainfall or runoff into the river. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 45.75 meters (150 feet) of the high water mark of the river. Debris, litter, construction material, etc. shall not be allowed to drift from the work area and shall be cleaned up daily.

Times of Construction.

- Restricting the timing of the construction to avoid steelhead migration periods can prevent impacts to steelhead. Construction activities in the river channel, such as driving steel pilings and casting concrete piers, will be limited to the period of June 1 through October 31. If it is necessary to conduct work activities outside these periods, the County shall obtain prior authorization from the California Department of Fish and Game, the U.S. Army Corps of Engineers, and the National Marine Fisheries Service. This restriction will prevent impacts to upper basin steelhead during migration periods and would allow unimpeded migration by both steelhead adults and smolts.

- It is expected that bridge construction activities will occur during the summer when the river flows are lowest or the river bed is dry (depending upon the particular year's streamflow). Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.

- All winter erosion control shall be in place by October 15th of each year. All erosion control shall be maintained into winter in working condition.

Project Completion.

- Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the river. If the channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice like area. If the river bank has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the riverbed shall be as nearly as possible the same gradient as existed prior to disturbance.

- Embankment areas, while being brought up to grade and during periods of completion prior to final roadbed construction, shall be protected by various measures to eliminate erosion and the siltation of downstream facilities and adjacent areas. These measures may include, but shall not be limited to: temporary downdrains, either in the form of pipes or paved ditches with protected outfall areas; graded berms around areas to eliminate erosion of embankment slopes by surface runoff; confined ponding areas to desilt runoff; and temporary check dams in toe of slope ditches to desilt runoff.

Floodplains and Scour

The project site is located within the 100 year floodplain. A floodplain evaluation (Summary of Floodplain Encroachment) has been prepared and is provided in Appendix D. The floodplain evaluation concluded that construction of the replacement bridge will not have an adverse impact on the 100 year floodplain. With the replacement bridge in place, the 100 year flood would not overflow the riverbank, according to the Flood Plain Hydraulic Analysis, Monterey County, 1999 (Appendix D).

The Floodplain Hydraulic Analysis analyzed the hydraulics of the streambed at the bridge site based on the U.S. Army Corps of Engineers Hydrologic Engineering Center River Analysis System (HEC-
RAS). HEC-RAS is a system for calculating water surface profiles and sediment transport calculations. Water surface elevations for the 10 year, 50 year, and 100 year floods at the upstream edge of the existing and proposed bridge piers are shown in Table 6.A.

The replacement bridge's lowest elevation would be 102.4 feet above mean sea level (AMSL) and the 100 year flood level would be 29.30 meters (96.12 feet) AMSL. This would leave 1.9 meters (6.28 feet) of freeboard (clearance) between the replacement bridge and the 100 year flood level.

The bridge design for Alternatives 1A, 1, 4, and 5 would construct a replacement bridge at an elevation that would exceed that of the 100 year flood level. The scour study included in the Flood Plain Hydraulic Analysis concluded that the Carmel River has a history of degrading and meandering. Based on this hydraulic history, the following design guidelines to reduce scour potential will be implemented as part of the project:

- The top of the pile cap shall be placed below the level of the computed 100 year pier scour.
- The abutments shall be protected to maintain the channel configuration adjacent to the abutments. Protection should be provided to the level of the 100 year contraction scour.

Alternative 1A would have two spans supported by double circular piers (in line, one behind the other) in the river channel, whereas Alternative 1 would have three spans supported by two pier walls. Therefore, Alternative 1A would have one fewer pier in the river channel that could be susceptible to scour.

The Floodplains Only Practicable Finding is provided in Appendix D.
The following mitigation measures shall be implemented to reduce potential adverse effects upon water quality (i.e., erosion, sedimentation, and turbidity), generated by the construction of the proposed project. These measures are derived from the Erosion and Sedimentation Control Plan to Protect Resident Steelhead Trout, December, 1999 (Appendix D). These measures shall be implemented by the Monterey County Public Works Department, consistent with the County’s policy that any development in critical watershed areas be designated, sited, and constructed in a manner that minimizes negative effects on the watershed.¹

HYD-1

As part of the County’s application for the required Section 404 permit, Section 401 Water Quality Certification, and Section 1601 Streambed Alteration Permit, the County of Monterey shall prepare and implement an effective erosion and sedimentation control plan. This plan shall be reviewed and approved by the regulatory agencies prior to the start of construction. At a minimum, the plan shall include the following measures:

**Measures to Reduce Stream Turbidity.**

- Work in the channel should be conducted between June 1 and October 31.
- Baseline turbidity conditions upstream of the construction site should be measured and recorded prior to the start of construction and reexamined when there is a change in upstream flow volume.
- To prevent turbidity and sedimentation during construction, cofferdams with by-pass flows to either a channel or a culvert should be installed both upstream and downstream of the construction zone. The cofferdams should be constructed of “clean river-run gravel” to prevent siltation. Removal of the cofferdams should cause no increase in turbidity levels above those recorded prior to the start of construction. See Figure 6.1.
- Any fill for the channel crossing or diversion will be “clean river-run gravel”.
- Sludge water pumped from the construction site (if sludge pumping is required) should be dumped into a sludge pond outside of the active channel and not into the channel downstream of the site. The sludge pond would be located at the southeast corner of the project site.
- Contour grading areas shall be protected against erosion to prevent siltation of downstream facilities and adjacent areas during grading operations. Various measures may include, but shall not be limited to: the use of graded contour berms to control sheet flow, supplemental grading of large areas around temporary or unfinished structures to provide desilting basins, and temporary ditch paving.

**Diversion of River During Construction.**

- During demolition and construction, all water shall be diverted around the work area. When work in a flowing channel is unavoidable, the entire streamflow shall be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream passage of fish. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and flow shall be diverted only when construction of the diversion is completed.
- If operations require moving equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the

¹ Monterey County General Plan, Policy 35.1.2, January 1996.
Biological Mitigation Measures

From FEIR/EA for the Schulte Road Bridge Replacement Project, October 2003.
Effects to biological resources shall be avoided or minimized with implementation of Mitigation Measure HYD-1 and the following mitigation measures:

BIO-1 To compensate for the removal of riparian habitat from bridge construction activities, the County shall replace impacted habitat at a minimum 3:1 ratio. Final replacement ratios will be determined in conjunction with the MPWMD and CDFG during the Section 1601 permit process. A riparian mitigation plan shall be prepared by a qualified biologist revegetation specialist and specifying the techniques necessary to recreate cottonwood-willow riparian forest habitat at a minimum of 3:1 replacement ratio. The plan shall be developed in consultation with MPWMD, as the riparian habitat to be removed is within the area of MPWMD’s larger Carmel River revegetation project. All tree replacement, including the size, planting location, and replacement ratio, will meet the requirements of Caltrans, the MPWMD, and the Monterey County Tree Ordinance. The plan shall specify the use of locally obtained native plant propagules (i.e., seeds and cuttings) for the revegetation effort. The plantings shall be monitored and maintained for a minimum of five years until established. The riparian mitigation plan shall be reviewed and approved by MPWMD and CDFG.

BIO-2 The permanent fill of 0.00016 hectare (0.0004 acre) of jurisdictional waters will be mitigated by removal of the existing bridge, which has two spans supported by double circular piers (one behind the other) in the streambed. Revegetation of these areas shall be included in the riparian revegetation plan, addressed in Mitigation BIO-1, above. Reestablishment of riparian vegetation at the toe of the river channel will also enhance site conditions for the California red-legged frog. In areas where existing bridge piers are removed, the river bed shall be contoured to match the elevation of the existing river channel.

BIO-3 Riparian vegetation adjacent to the construction area shall be fenced with protective fencing to preclude inadvertent damage from heavy equipment. Six foot tall plastic mesh fencing should be placed along the edge of the construction area and adjacent riparian vegetation, and anchored appropriately to prevent movement. The location of the fencing shall be field checked by a qualified biologist prior to construction.

BIO-4 Bare areas along the streambanks that are created by the removal of vegetation shall be revegetated with an erosion control seed mix prior to October 15 of the construction year. The seed mix should be compatible with the riparian revegetation plan; the use of crop barley is recommended, as this species will provide temporary erosion control, yet will not adversely affect the riparian revegetation efforts.

BIO-5 It is expected that bridge construction activities will occur during the summer when the river flows are lowest or the riverbed is dry (depending upon the particular year’s streamflow). Prior to construction activities, the County should prepare and implement an effective erosion and sedimentation control plan that will minimize erosion and sedimentation from graded area into downstream aquatic habitats. The erosion plan shall be approved by CDFG and other appropriate agencies prior to initiation of any construction activities.

BIO-6 Restrict construction activities in riparian areas to the dry season (June 1 through October 31).

BIO-7 The following measures to mitigate potential impacts to California red-legged frog are based on the recommendations of the Programmatic Formal Endangered Species
Act Consultation prepared for this species (USFWS 1999). The applicability of this consultation to the Schulte Road bridge project is subject to confirmation by the Corps and USFWS.

The following measures shall be implemented to minimize the potential for adverse impacts to California red-legged frogs or their habitat:

a) At least 15 days prior to construction, the permitee shall submit a list of names and credentials of biologists who would conduct the activities specified in the following measures.

b) A USFWS approved biologist shall survey the work site two weeks before the onset of work activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the USFWS to determine whether moving any of these life stages is appropriate. If the USFWS approves moving the frogs, the approved biologist shall be allowed sufficient time to move them from the work site to an approved relocation site before work activities begin.

c) Before construction begins, a USFWS approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat; the importance of the red-legged frog and its habitat; the general measures that are being implemented to minimize impacts to the California red-legged frog; and the boundaries within which the workers and equipment must remain.

d) A USFWS approved biologist shall be present at the work site until such time as removal of all California red-legged frogs (if required) and instruction of workers has been completed. After this time, the contractor shall designate a person to monitor on-site compliance with all minimization measures. The USFWS approved biologist shall ensure that this individual receives the training outlined above and in the identification of red-legged frogs. The monitor and the USFWS approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and USFWS (see USFWS 1999). If work is stopped, the Corps and USFWS shall be notified immediately by the biologist or on-site monitor.

e) Work activities shall be completed between April 1 and November 1. If it is necessary to conduct work activities outside this period, prior authorization must be obtained from the Corps, with USFWS approval.

f) All trash shall be properly contained, removed from the work site, and disposed of regularly.

g) All fueling and maintenance of vehicles and other equipment, and staging areas, shall occur at least 20 meters (66 feet) from any riparian habitat or water body. The permitee shall ensure that contamination of riparian habitat does not occur during such operations. Prior to the onset of work, the permitee shall prepare a water quality management plan to allow a prompt and effective response to any accidental spills. All workers shall be informed
of the importance of preventing spills and the appropriate measures to be taken should a spill occur.

h) Upon completion of the project, disturbed portions of the site shall be revegetated with an appropriate assemblage of native riparian and upland plant species for the area. A restoration and monitoring plan shall be prepared with the project proposal for review and approval by the USFWS and Corps. The plan must include location of restoration, plant species to be used, restoration techniques, time of year the work will be done, and identifiable success criteria for completion and remedial actions if the success criteria are not achieved.

i) Stream contours shall be returned to their original condition at the end of the project, unless consultation with the USFWS has determined that it is not beneficial to the species or feasible.

j) The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated.

k) To control erosion during and after construction, the permittee shall implement best management practices, as identified by the Regional Water Quality Control Board.

l) The USFWS approved biologist shall permanently remove individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes (sunfish) from the project site, to the extent possible. This activity shall be in compliance with the California Fish and Game Code.

BIO-8

Much of the construction will occur within the MPWMD’s jurisdiction (Carmel River Channel up to the 10 year flow line, plus a 7.6 meter [25 foot] strip on both sides). Therefore, the County shall apply for and obtain a river work permit from the MPWMD prior to the start of construction.
Construction Window Begin and End dates.

Mitigation from FONSI

- June 1 – October 31 Restrict construction in River Channel or Riparian Areas.
- April 1 – November 1 Restrict work activities.

Department of Fish and Game Streambed Alteration Agreement

- June 1 – October 31 Construction within jurisdictional streambed limit.

Regional Water Quality Control Board

- April 15 – October 15 Construction activities in the Carmel River limited to dry season.

Corps of Engineers

- June 1 – October 31 Construction within jurisdictional streambed limit.
- June 1 – October 15 Construction involving instream work will be completed during low flow conditions.

NOAA Fisheries

- June 1- October 31

U.S. Dept. of the Interior – Fish and Wildlife Service

- April 1 – November 1 Project limit.
- June 1 - October 31 Work in the stream channel.
SECTION 12 - GENERAL PREVAILING WAGE RATES INDEX

The current general prevailing wage determinations are posted on the internet at:

http://www.dir.ca.gov/dlslr/
SECTION 14 - FEDERAL REQUIREMENTS FOR FEDERAL AID CONSTRUCTION PROJECTS

The Schulte Road Bridge Project is not located on the Federal-Aid System (roadway classified as local roads or rural minor collectors), which are exempted from certain sections of the “Required Contract Provisions Federal Aid Construction Projects”.

The following sections of the “Required Contract Provisions Federal-Aid Construction Contracts” do not apply to this Project.

Section IV. Payment of Predetermined Wages
Section V. Statements and Payrolls
Section VI. Record of Materials, Supplies, and Labor
Section VII. Subletting or Assigning the Contract
SECTION 14. FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS

GENERAL.—The work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, "Form FHWA 1273, are included in this Section 14. Whenever in said required contract provisions references are made to "SHA contracting officer", "SHA resident engineer", or "authorized representative of the SHA", such references shall be construed to mean "Engineer" as defined in Section 1-1.18 of the Standard Specifications.

PERFORMANCE OF PREVIOUS CONTRACT.—In addition to the provisions in Section II, "Nondiscrimination," and Section VII, "Subletting or Assigning the Contract," of the required contract provisions, the Contractor shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of $10,000 will be considered under the provisions of Section VII of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION.—The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects.

Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28, USC, Sec. 1746, is included in the proposal.

PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN SUBCONTRACTING.—Part 26, Title 49, Code of Federal Regulations applies to this Federal-aid project. Pertinent sections of said Code are incorporated in part or in its entirety within other sections of these special provisions.

Schedule B—Information for Determining Joint Venture Eligibility

1. Name of joint venture ____________________________

2. Address of joint venture ____________________________

3. Phone number of joint venture _______________________

4. Identify the firms, which comprise the joint venture. (The MBE partner must complete Schedule A.) _______________________

   a. Describe the role of the MBE firm in the joint venture. _______________________

   b. Describe very briefly the experience and business qualifications of each non-MBE joint venturer: ______________________

5. Nature of the joint venture’s business _______________________

6. Provide a copy of the joint venture agreement. _______________________

7. What is the claimed percentage of MBE ownership? ___

8. Ownership of joint venture: (This need not be filled in if described in the joint venture agreement, provided by question 6.) _______________________

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FR-1
a. Profit and loss sharing.
b. Capital contributions, including equipment.
c. Other applicable ownership interests.

9. Control of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their titles) who are responsible for day-to-day management and policy decision-making, including, but not limited to, those with prime responsibility for:

a. Financial decisions

b. Management decisions, such as:

1. Estimating

2. Marketing and sales

3. Hiring and firing of management personnel

4. Purchasing of major items or supplies

c. Supervision of field operations

Note: If, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by this regulation, there is any significant change in the information submitted, the joint venture must inform the grantee, either directly or through the prime contractor if the joint venture is a subcontractor.

Affidavit

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to grantee current, complete and accurate information regarding actual joint venture work and the payment therefore and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

Name of Firm

Name of Firm

Signature

Signature

Name

Name

Title

Title

Date

Date

On this _____ day of __________, 19 __, before me appeared ____________________, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) _________________ to execute the affidavit and did so as his or her free act and deed.

Notary Public

Commission expires

[Seal]

Date

State of __________________________

County of _________________________

On this _____ day of __________, 19 __, before me appeared ____________________, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) _________________ to execute the affidavit and did so as his or her free act and deed.

Notary Public

Commission expires

[Seal]

Revised 3-95
08-07-95
FR-2
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS
(Exclusive of Appalachian Contracts)

ATTACHMENTS
A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:
   Section I, paragraph 2;
   Section IV, paragraphs 1, 2, 3, 4, and 7;
   Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:
   a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
   b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION
(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
   a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
   b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/ or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively
administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.)

In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 26, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements.

Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

1. The number of minority and non-minority group members and women employed in each work classification on the project;

2. The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

3. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

4. The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III **NONSEGREGATED FACILITIES**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consumption of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

I. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c) the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates) confirmed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-149S shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics subject to the provisions of Section IV, paragraph 3(b). Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits of the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit
as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laboror or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermination rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermination rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

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5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof of the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total construction cost for roadway and bridge is less than $1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used By Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products, which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

**NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS**

18 U.S.C. 1020 reads as follows:

"Whoever being an officer, agent, or employee of the United States, or any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof, in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-Aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented:

"Shall be fined not more than $10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized.
for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

   2. Instructions for Certification - Lower Tier Covered Transactions:

      (Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

      a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

      b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

      c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

      d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

      e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

      f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

      g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the

Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

   ***

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

      (Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

      1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

         a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

         b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract,
grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

---

**FEDERAL-AID FEMALE AND MINORITY GOALS**

In accordance with Section II, "Nondiscrimination," of Required Contract Provisions Federal-aid Construction Contracts the following are the goals for female utilization:

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<thead>
<tr>
<th>Goal for Women</th>
<th>(applies nationwide)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>177 Sacramento, CA:</td>
<td>6.9</td>
<td></td>
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The following are goals for minority utilization:

**CALIFORNIA ECONOMIC AREA**

<table>
<thead>
<tr>
<th>Goal</th>
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<tbody>
<tr>
<td>174 Redding, CA:</td>
<td>6.8</td>
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**Non-SMSA Counties:**
- CA Lassen; CA Modoc;
- CA Plumas; CA Shasta;
- CA Siskiyou; CA Tehama.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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<tbody>
<tr>
<td>175 Eureka, CA:</td>
<td>6.6</td>
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**Non-SMSA Counties:**
- CA Del Norte; CA Humboldt;
- CA Trinity.

**176 San Francisco-Oakland-San Jose, CA:**

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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</thead>
<tbody>
<tr>
<td>SMSA Counties:</td>
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</tr>
</tbody>
</table>
- 7120 Salinas-Seaside-Monterey, CA |
- 7360 San Francisco-Oakland, CA |
- CA Alameda; CA Contra Costa;
- CA Marin; CA San Francisco;
- CA San Mateo.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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<tr>
<td>7400 San Jose, CA:</td>
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- CA Santa Clara.

<table>
<thead>
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<th>Goal</th>
<th>(Percent)</th>
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- CA Santa Cruz.

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<th>(Percent)</th>
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- CA Sonoma.

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<tbody>
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</table>
- CA Napa; CA Solano.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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<tr>
<td>Non-SMSA Counties:</td>
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</table>
- CA Lake; CA Mendocino;
- CA San Benito.

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<tbody>
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<td>16.1</td>
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</table>
- CA Placer; CA Sacramento;
- CA Yolo.

<table>
<thead>
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<th>Goal</th>
<th>(Percent)</th>
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<tr>
<td>Non-SMSA Counties:</td>
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</tbody>
</table>
- CA Butte; CA Colusa;
- CA El Dorado; CA Glenn;
- CA Nevada; CA Sierra;
- CA Sutter; CA Yuba.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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- CA Stanislaus.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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- CA San Joaquin.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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</thead>
<tbody>
<tr>
<td>Non-SMSA Counties:</td>
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</tbody>
</table>
- CA Alpine; CA Amador;
- CA Calaveras; CA Mariposa;
- CA Merced; CA Tuolumne.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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- CA Kern.

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<tr>
<th>Goal</th>
<th>(Percent)</th>
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- CA Fresno.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-SMSA Counties:</td>
<td>23.6</td>
</tr>
</tbody>
</table>
- CA Kings; CA Madera;
- CA Tulare.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 Los Angeles, CA:</td>
<td>28.3</td>
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</tbody>
</table>
- CA Los Angeles.

<table>
<thead>
<tr>
<th>Goal</th>
<th>(Percent)</th>
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<tbody>
<tr>
<td>6000 Oxnard-Simi Valley-Ventura, CA:</td>
<td>21.5</td>
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- CA Ventura.

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08-07-95

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6780 River-San Bernardino-
Ontario, CA................................. 19.0
CA Riverside;
CA San Bernardino.
7480 Santa Barbara-Santa Maria-
Lompoc, CA................................. 19.7
CA Santa Barbara.
Non-SMSA Counties ...................... 24.6
CA Inyo; CA Mono;
CA San Luis Obispo.

181 San Diego, CA:

SMSA Counties
7320 San Diego, CA....................... 16.9
CA San Diego.
Non-SMSA Counties....................... 18.2
CA Imperial.

In addition to the reporting requirements set forth elsewhere in this contract the Contractor and subcontractors holding subcontracts, not including material suppliers, of $10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form FHWA PR-1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.
(To be used, when applicable, in Federal-aid projects)
*Insert number of trainees.

FEDERAL REQUIREMENT TRAINING SPECIAL PROVISIONS

FEDERAL REQUIREMENT TRAINING
SPECIAL PROVISION. -- As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training to develop full journeymen in the types of trades or job classification involved.

The goal for the number of trainees or apprentices to be trained under the requirements of this special provision will be ❄️ 4 ❄️.

In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees or apprentices are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of trainees or apprentices in each occupation shall be in their first year of apprenticeship or training.

The number of trainees or apprentices shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing work, the Contractor shall submit to the Department for approval the number of trainees or apprentices to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee or apprentice employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees or apprentices as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority and women trainees or apprentices (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees or apprentices) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee or apprentice in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by both the Department and the Federal Highway Administration. The Department and the Federal Highway Administration will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee or apprentice for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with the State of California, Department of Industrial Relations, Division of Apprenticeship Standards recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein.

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This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees or apprentices are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or apprentice or pays the trainee's or apprentice's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee or apprentice as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee or apprentice will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees or apprentices be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees or apprentices specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Only trainees or apprentices registered in a program approved by the State of California's State Administrator of Apprenticeship may be employed on the project and said trainees or apprentices shall be paid the standard wage specified under the regulations of the craft or trade at which they are employed.

The Contractor shall furnish the trainee or apprentice a copy of the program he will follow in providing the training. The Contractor shall provide each trainee or apprentice with a certification showing the type and length of training satisfactorily completed. The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.
SECTION 15 - SAMPLE CONTRACT
SAMPLE - CONTRACT

CONTRACT FOR PUBLIC WORK

COUNTY OF MONTEREY

STATE OF CALIFORNIA

CONTRACT NO. 382065

THIS AGREEMENT, made by and between the COUNTY OF MONTEREY, a political subdivision of the State of California, hereinafter called the "County," and ________________________, hereinafter called the "Contractor,"

WITNESSETH:

1. THE WORK

The Contractor shall do all the work and furnish all the materials, except such as are mentioned in any of the contract documents to be furnished by the County, necessary to construct and complete in a good, workmanlike and substantial manner and to the satisfaction of the County, the following public work:

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

COUNTY PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

in accordance with this agreement and with all of the following additional contract documents which are incorporated into and made a part of this agreement:


(b) A set of plans and cross sections (when applicable) entitled:

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

FEDERAL AID PROJECT NO. BRLO-5944(010)
STATE NO. 05-141004L
CONTRACT NO. 382065
(b) The Special Provisions for the work.

(c) The Notice to Bidders calling for bids.

(d) The Payment and Performance bonds required.

(f) Local Agency Bidder – DBE information, Exhibit 15-G(2)

(g) Certificate of Insurance

(h) The accepted bid including the following:

(1) List of Subcontractors.
(2) Equal Employment Opportunity Certification.
(3) Public Contract Code
   Section 10285.1 Statement.
   Section 10162 Questionnaire.
   Section 10232 Statement.
(4) Non-collusion Affidavit.
(5) Debarment and Suspension Certification.
(6) Non-Lobbying Certification for Federal Aid Contracts
(7) Disclosure of Lobbying Activities
(8) Statement Concerning Employment of Undocumented Aliens
(9) Contractor’s Certificate as to Worker’s Compensation.
(10) List of Satisfied Public Agencies
(11) Bidder’s Bond
(12) Bidder’s List
(13) Local Agency Bidder – UDBE Commitment, Exhibit 15-G(1)
(14) UDBE Information – Good Faith Efforts, Exhibit 15-H

All contract documents are intended to cooperate, so that any work called for in one and not mentioned in another is to be executed the same as if mentioned in all. However, should there be
any conflict between the terms of this instrument and the Contractor's bid or proposal, then this instrument shall control.

2. **WORKERS' COMPENSATION**

   In accordance with the provisions of Section 3700 of the Labor Code, the Contractor and every Subcontractor will be required to secure the payment of compensation to his employees.

3. **CONTRACT PRICE**

   The County shall pay the Contractor the following prices for the performance of this contract:

**SCHULTE ROAD BRIDGE**  
**AT CARMEL RIVER**  
**COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115**

**FEDERAL AID PROJECT NO. BRLO-5944(010)**  
**STATE NO. 05-141004L**  
**CONTRACT NO. 382065**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM CODE</th>
<th>ITEM DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT OF MEASURE</th>
<th>ITEM PRICE (In figures)</th>
<th>TOTAL COST (In Figures)</th>
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<td>TOTAL COST (In Figures)</td>
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<td>TOTAL COST (In Figures)</td>
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<td>Drive Steel Pile (HP 12 x 53)</td>
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<td>Concrete Barrier (Type 732A)</td>
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<td>Pavement Marker (Retroreflective Type D) (S)</td>
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<td>77</td>
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<td>Mobilization (10%)</td>
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(P) Denotes Partial Pay Item  
(F) Denotes Final Pay Item  
(S) Denotes Specialty Item

TOTAL BID $__________
IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the dates appearing opposite their respective signatures.

**CONTRACTOR:**

(Name of Company)

By: ________________________________  By: ________________________________

Name: ______________________________

Title: ______________________________

Date: ______________________________

**COUNTY OF MONTEREY:**

By: ________________________________

Name:  Paul H. Greenway, P.E.

Title:  Acting Director of Public Works

Date: ______________________________

Approved as to Form,
County Counsel

Approved as to Fiscal Provisions,
Auditor-Controller

By: ________________________________  By: ________________________________

Name:  Cynthia L. Hasson

Title:  Deputy County Counsel

Date: ______________________________

Approved as to Indemnity and Insurance Provisions,
Risk Management

By: ________________________________

Name:  Steven F. Mauck

Title:  Risk Manager

Date: ______________________________
COUNTY OF MONTEREY

PAYMENT BOND
(Civil Code Section 3249)

WHEREAS, the County of Monterey has awarded to Principal, as Contractor, a contract for the following Project:

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

AND WHEREAS, Principal, as Contractor, is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen, and other persons furnishing labor and materials on the Project, as provided by law.

NOW, THEREFORE, we ________________________________, as Principal, and ________________________________, as Surety, are held and firmly bound unto the County of Monterey, a political subdivision of the State of California (hereinafter called "County"), and to the persons named in California Civil Code Section 3181 in the penal sum of ________________________________ for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

If the Principal, or any of Principal's heirs, executors, administrators, successors, assigns, or Subcontractors, (1) fails to pay in full all of the persons named in Civil Code Section 3181 with respect to any labor or materials furnished by said persons on the Project described above, or (2) fails to pay in full all amounts due under the California Unemployment Insurance Code with respect to work or labor performed on the Project described above, or (3) fails to pay for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal and Subcontractors pursuant to Unemployment Insurance Code Section 13020 with respect to such work and labor, then the Surety shall pay for the same.
Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to the work to be performed there under, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

If suit is brought upon this bond by the County and judgment is recovered, the Surety shall pay all litigation expenses incurred by the County in such suit, including attorneys’ fees, court costs, expert witness fees and investigation expenses.

This bond inures to the benefit of any of the persons named in Civil Code Section 3181, and such persons or their assigns shall have a right of action in any suit brought upon this bond, subject to any limitations set forth in Civil Code Sections 3247 et seq. (Civil Code, Division 3, Part 4, Title 15, Chapter 7: Payment Bond for Public Works).

IN WITNESS WHEREOF the above-bounden parties have executed this instrument under their several seals this day of , the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

______________________________
Principal

By ____________________________

Name and Title ______________________

(Corporate Seal)

______________________________
Surety

By ____________________________

Name and Title ______________________

(Attach notary acknowledgement for all signatures and attorney-in-fact certificate for signature by surety’s representative)
COUNTY OF MONTEREY

PERFORMANCE BOND

WHEREAS, the County of Monterey has awarded to Principal, __________________________ as Contractor, a contract for the following Project:

SCHULTE ROAD BRIDGE
AT CARMEL RIVER
COUNTY BRIDGE NO. 501, STATE BRIDGE NO. 44C-0115

PROJECT NO. 382065
STATE PROJECT NO. EA 05-141004L
FEDERAL AID PROJECT NO. BRLO-5944(010)

WHEREAS, Principal, as Contractor, is required to furnish a bond in connection with said contract, to secure the faithful performance of said contract.

NOW, THEREFORE, we__________________________________________, as Principal, and__________________________________________ as Surety, are held and firmly bound unto the County of Monterey, a political subdivision of the State of California (hereinafter called "County"), in the penal sum of ____________________________, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

If the Principal, as Contractor, or Principal's heirs, executors, administrators, successors, or assigns, (1) shall in all things stand to and abide by and well and truly keep and perform the covenants, conditions, and agreements in said contract and any alteration thereof made as therein provided, on Principal's part to be kept and performed, at the time and in the manner therein specified and in all respects according to their true intent and meaning, and (2) shall defend, indemnify and save harmless the County, the members of its board of supervisors, and its officers, agents and employees as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.
Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

Whenever the Principal, as Contractor, is in default, and is declared in default, under the contract by the County of Monterey, the County of Monterey having performed its obligation under the contract, Surety may promptly remedy the default, or shall promptly:

1. Complete the contract in accordance with its terms or conditions, or
2. Obtain a bid or bids for submission to County of Monterey for completing the contract in accordance with its terms or conditions, and upon determination by County of Monterey and Surety of the lowest responsible and responsive bidder, arrange for a contract between such bidder and County of Monterey, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of contract price.

If suit is brought upon this bond by the County and judgment is recovered, the Surety shall pay all litigation expenses incurred by the County in such suit, including attorney’s fees, court costs, expert witness fees and investigation expenses.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals this ______ day of __________________, 20___, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

________________________________________
Principal

By ______________________________________

Name and Title ____________________________

(Corporal Seal)

________________________________________
Surety

By ______________________________________

Name and Title ____________________________

(Attach notary acknowledgement for all signatures and attorney-in-fact certificate for signature by surety’s representative)