

DEPARTMENT OF TRANSPORTATION

ESC/OE MS#43
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SACRAMENTO, CA 94274-0001



TDD (916) 654-4014

December 23, 1997

04-CC,Sol-680-25.0/25.5,L0.0/0.6
04-0440U4

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.8 MILE NORTH OF MOCOCO OVERHEAD TO BENICIA-MARTINEZ BRIDGE TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 21, 1998, instead of the original date of January 13, 1998.

This addendum is being issued to set a new bid opening date as shown herein and revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

A copy of Contractor's Inquiry Responses No. 1 dated December 18, 1997 is provided to each Proposal and Contract Book holder.

On Project Plan Sheet 120, Notes 1 through 6 under "Description Of Work And Construction Sequence" are replaced with the following notes:

- "1. Open access to all cells (see NOTES, note 6).
2. Retrofit the lower part (15') of footing for cells 1 through 8. Install grouted pipe piles in cells 1 through 8, and install new caissons in cells 11 through 14.
3. Connect newly installed caissons to the footing box (cells 11 through 14).
4. Complete retrofit including upper reinforced concrete footing cap in cells 1 through 10 for Piers 5 through 11 and cells 1 through 8 for Piers 4 and 12. Strengthen walls in the remaining cells.
5. Close access."

On Project Plan Sheet 137 Section F-F, the callout "Core 1 1/2" Ø holes (typ)" is revised to "Core 2" Ø holes (typ).

In the Notice To Contractors And Special Provisions, in the "Pre-Award Meeting Special Notice" and the first paragraph of Section 3, and in the Proposal And Contract in the "Pre-Award Meeting Special Notice", the pre-award qualifications review meeting date is revised from January 15, 1998 to January 23, 1998.

In the Notice To Contractors the following paragraph is added after the fifth paragraph:

"Prospective bidders may make arrangements to visit the jobsite by contacting the Bridge Manager, Benicia-Martinez Bridge, at telephone (707) 648-4111."

In the Notice To Contractors, in the sixth paragraph, the e-mail address is revised as follows:

"<http://tresc.dot.ca.gov/sfobb/BMU4inquiry.html>"

In the Special Provisions, Section 4. "Beginning Of Work, Time Of Completion And Liquidated Damages" paragraph nine is revised as follows:

"A working day as defined in said Section 8-1.06 is re-defined for this project. Paragraph two through paragraph five, inclusive, of said Section 8-1.06 shall not apply. Saturdays, Sundays and legal holidays, except days of inclement weather, will be counted as working days."

In the Special Provisions, Section 5-1.15, "Subcontracting" the following paragraph is added after the first paragraph:

"The first sentence in third paragraph of said Section 8-1.01 is amended to read:

The Contractor shall perform with his own organization contract work amounting to not less than 30 percent of the original total contract price, except that any designated "Specialty Items" may be performed by subcontract and the amount of such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with his own organization."

In the Special Provisions, Section 5-1.17, "Disputes Review Board" is replaced with Section 5.1.17, "Disputes Review Board" as attached.

In the Special Provisions, Section 5-1.18, "Payments" in the second paragraph the first listed contract item is revised as follows:

"Electronic Mobile Daily Diary Computer System \$180,000"

In the Special Provisions, Section 5-1.21, "Relations With U.S. Army Corps Of Engineers" in fourth paragraph the 4th condition is revised as follows:

"4. A temporary construction platform will be required to access Pier 13. Access shall be from the water only. All temporary construction platforms shall be removed at project completion. Special Condition number 7 of the Corps of Engineers permit cover letter (dated March 4, 1997) is to be disregarded."

In the Special Provisions, Section 5-1.22, "Relations With Bay Conservation And Development Commission" the following paragraph is added after the fourth paragraph:

"Attention is directed to Section I.A., item (6) of the Permit. Regardless of item (6) regarding the construction and/or placing and using temporary work platforms such as trestles, barges or solid fill platforms, no temporary earthen or rock fill is permitted at Pier 3 and Pier 13."

In the Special Provisions, Section 5-1.22, "Relations With Bay Conservation And Development Commission" the fifth paragraph is revised as follows:

"Any modifications to the permit which are proposed by the Contractor shall be submitted in writing to the Engineer for transmittal to the Bay Conservation and Development Commission for their consideration."

In the Special Provisions, Section 5-1.22, "Relations With Bay Conservation And Development Commission" the seventh paragraph is revised as follows:

"Any modifications to any agreement between the Department of Transportation and the Bay Conservation and Development Commission shall be fully binding on the Contractor, and the provisions of this section shall be made a part of every subcontract executed pursuant to this contract."

In the Special Provisions, Section 5-1.28, "Overhead", is revised as attached.

In the Special Provisions, Section 5-1.29, "Access To Jobsite", the first paragraph is replaced as follows:

" Access to all construction activities on the north side of the Carquinez Strait near Piers 3 shall be from the water (barge) only. Land access on the north side of the Carquinez Strait near Pier 3 including the crossing of the Union Pacific Railroad tracks shall be permitted only after October 1, 1998."

In the Special Provisions, Section 5-1.30, "Drawings", item No. 1 is revised as follows:

"1. Working drawings shall be submitted in accordance with Section 55, "Steel Structures" of the Standard Specifications."

In the Special Provisions, Section 5-1.30, "Drawings", item No. 4 is added after item No. 3 as follows:

"4. Electronic files for all shop drawings shall be on Microstation format or similar."

In the Special Provisions, Section 5-1.31, "Permits And Licenses", in the second paragraph the permit "Right-of-Entry into TOSCO Corporation" is deleted.

In the Special Provisions, Section 5-1.32, "State Owned Catwalks And Scaffolds", the following sentence is added to the fourth paragraph:

"The catwalks are not to be used for the storage of equipment and materials."

In the Special Provisions, Section 5-1.32, "State Owned Catwalks And Scaffolds", the sixth paragraph is revised as follows:

"The State owned traveling scaffolds and traveling scaffold rails will not be available for the Contractor's use."

In the Special Provisions, Section 5-1.34, "Transportation For The Engineer", the eleventh paragraph is revised as follows:

"The boat shall remain the property of the Contractor, and shall not be removed from the site of the work until after acceptance of the contract."

In the Special Provisions, Section 8-3. "Welding" is replaced with Section 8-3. "Welding" as attached.

In the Special Provisions, Section 10-1.01, "Order Of Work", the following paragraph is added after the second paragraph:

"Attention is directed to "Access To Jobsite", of these special provisions."

In the Special Provisions, Section 10-1.01, "Order Of Work", the fifth paragraph is revised as follows:

"Attention is directed to "Cooperation" of these special provisions. The outer lanes as shown in Stage 1, Phase B will not be available to truck traffic until the completion of Contract No. 04-046224, scheduled for February 28, 1998."

In the Special Provisions, Section 10-1.02, "Electronic Mobile Daily Diary Computer System" and 10-1.03, "Electronic Mobile Daily Diary System Data Delivery" are replaced as attached.

In the Special Provisions, Section 10-1.05, "Water Pollution Control", is replaced as attached.

In the Special Provisions, Section 10-1.05A, "Non-Storm Water Discharges", is added as attached.

In the Special Provisions, Section 10-1.07, "Progress Schedule (Critical Path), the following paragraph is added after the third paragraph entitled "Preconstruction Scheduling Conference":

"The baseline schedule submittal shall include a 3 1/2 floppy diskette containing the data files used to generate the schedule."

In the Special Provisions, Section 10-1.07, "Progress Schedule (Critical Path), item No. 4 of the paragraph entitled "Equipment and Software" is revised as follows:

"4) A two-gigabyte minimum hard disk drive, a 1.44 megabyte 3 1/2 inch floppy disk drive, 16x speed minimum CD-ROM drive, and ethernet card, 33.6/14.4 modem."

In the Special Provisions, Section 10-1.12, "Maintaining Traffic", the ninth paragraph is revised as follows:

"SCHEDULING CLOSURES.--On or before 12:00 p. m. on Monday of each week the Contractor shall furnish to the Engineer a schedule of all proposed lane and ramp closures for the following Monday. Any request for changes to the weekly schedule shall be submitted to the Engineer for approval at least 24 hours prior to the proposed change or as required by the Engineer.

All requests must indicate the closure date(s), time(s) of closure, county, route, direction, post mile, description of facility closed (lane, on/off-ramp, connector ramp, collector road, shoulder, median, bridge, etc.).

Approval or denial of lane closure requests will be determined by 1:00 p.m. on the Thursday preceding the week of the requested work. Approval does not allow closures other than the date, time, and location indicated. For closures that are postponed due to weather or other unforeseen circumstances, previously approved requests may be submitted for consideration of rescheduling during the week and will be approved only after a case-by-case review by the Engineer.

Request for approval for unforeseen lane closures may be submitted at any time, but immediate review/approval cannot be guaranteed. Those conflicting with previously approved closures will be denied. For critical unforeseen lane closure requests that must be responded to immediately, the Engineer shall be immediately contacted for timely resolution.

If the Contractor's request for lane closure is denied and the Engineer determines that the Contractor is delayed in performing current controlling operation or operations of work, the Contractor will be granted an extension of time commensurate with the delay in accordance with the provisions of Section 8-1.07, "Liquidated Damages," of the Standard Specifications.

The Contractor will be compensated for the idle time of forces and equipment and any additional costs involved in rescheduling and moving of equipment in accordance with the provisions of Section 8-1.09, "Right of Way Delays," of the Standard Specifications."

In the Special Provisions, Section 10-1.12, "Maintaining Traffic", the thirteenth paragraph is revised to include March 31st.

In the Special Provisions, Section 10-1.12, "Maintaining Traffic", the following paragraph is added after the seventeenth paragraph:

"This liquidated damages herein provided for are in addition to those specified in Section 4, "Beginning Of Work, Time Of Completion And Liquidated Damages" elsewhere in these special provisions."

In the Special Provisions, Section 10-1.19, "Existing Highway Facilities", the following paragraph is added after the second paragraph:

"Additional miscellaneous reports and documents, including but not limited to design and maintenance investigations, original and supplemental bridge reports, resident engineers reports, construction photographs, maintenance repairs, fender, traveler and barrier rail modifications, that may be reviewed and copied, are available at the Toll Bridge Seismic Retrofit Program Duty Senior's Desk, at 111 Grand Avenue, Oakland, California, (510) 286-5549."

In the Special Provisions, Section 10-1.20, "Earthwork", the following subsection 10-1.20A, "Dredging" is added as attached.

In the Special Provisions, Section 10-1.21, "Piling", the third paragraph is revised as follows:

"Foundation Geotechnical Report (Volumes 1 through 5) and Foundation Recommendations for Approach Structures are available to the Contractor for inspection at the Department of Transportation, Toll Bridge Program Duty Senior's Desk, 111 Grand Avenue, Oakland, California, Telephone No. (510) 286-5549."

In the Special Provisions, Section 10-1.21, "Piling", the eighth paragraph is revised as follows:

"Difficult pile installation is anticipated due to the presence of soft bay mud overlying dense soils, caving soils, tidal flow, low overhead clearance, the requirements of pile embedment into rock, drilling into rock, and coring through reinforced concrete."

In the Special Provisions, Section 10-1.21, "Piling", subsection "Load Test Piles" the twenty-second paragraph is revised as follows:

"The above prices shall include sales tax and delivery of materials to the jobsite, and will be guaranteed to any bidder ordering such materials and services prior to April 30, 1998, provided delivery is accepted within 90 days after the order is placed. The above prices will increase by 5 percent for orders placed after April 30, 1998, provided delivery is accepted within 90 days after the order is placed."

In the Special Provisions, Section 10-1.21, "Piling", subsection "Caisson" item No.1 of the third paragraph is revised as follows:

"1. Advance a 72-inch permanent steel casing into foundation material to the 72-inch permanent steel casing specified tip elevation, by internal excavation or drilling, and supplemental driving."

In the Special Provisions, Section 10-1.21, "Piling", subsection "Drilled Shafts" the following paragraph is added after the first paragraph as follows:

"Unless otherwise ordered by the Engineer, drilled shafts at each pier location shall be constructed to the required anchorage length. The required anchorage length is defined as that length determined by the difference between the 66-inch drilled shaft specified tip elevation and the 72-inch permanent steel casing specified tip elevation at each pier location, as shown on the plans."

In the Special Provisions, Section 10-1.21, "Piling", subsection "Drilled Shafts" the third paragraph is revised as follows:

"The Contractor shall use one of the following methods or a combination thereof conforming to the Standard Specifications and these special provisions, to prevent caving of the hole prior to concrete placement:

1. Temporary casings.
2. Slurry.
3. Maintaining constant hydrostatic pressure in the drilled shaft equal to or greater than that which exists at high tide during drilling and until the concrete is placed."

In the Special Provisions, Section 10-1.21, "Piling", subsection "Inspection Pipes" the seventh paragraph is revised as follows:

"The supporting system proposed by the Contractor to maintain the required alignment of the pipes shall be submitted to the Engineer and approved prior to use. The portion of the pipes above the tremie placed concrete may be placed after the caisson is dewatered."

In the Special Provisions, Section 10-1.24, "Tiedown Anchors", the third paragraph is revised as follows:

"Foundation Geotechnical Report (Volumes 1 through 5) and Foundation Recommendations for Approach Structures are available to the Contractor for inspection at the Department of Transportation, Toll Bridge Program Duty Senior's Desk, 111 Grand Avenue, Oakland, California, Telephone No. (510) 286-5549."

In the Special Provisions, Section 10-1.24, "Tiedown Anchors", the seventh paragraph is replaced with the following paragraph:

"The Contractor may propose furnishing an alternative number of tiedown anchors that provide the same vertical component and distribution of design force as provided by the planned tiedown anchors. The Contractor shall submit, in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, working drawings and calculations for furnishing such an alternative number of tiedown anchors. Alternative footing details shall be furnished, for approval by the Engineer, if the number of tiedown anchors is changed. Said working drawings and calculations shall be signed by an Engineer who is registered as a Civil Engineer in the State of California."

In the Special Provisions, Section 10-1.24, "Tiedown Anchors", subsection "Materials" the twelfth paragraph is replaced with the following two paragraphs:

"Prior to construction of tiedown anchors, the Contractor shall establish the creep characteristics of the anchorage and strand. These creep characteristics shall be established within temperature ranges which will exist during load testing, and will be used as needed to correct the creep movements measured during load testing, and to make adjustments to the lock off force.

The Contractor shall submit to the Engineer for approval a procedure for establishing the creep characteristics of the anchorage and strand, in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The procedure shall identify materials, equipment and methods to be used for establishing the creep characteristics. The procedure shall also identify the temperature range in which the creep characteristics will be determined, and the method for controlling and recording temperature during the procedure."

In the Special Provisions, Section 10-1.24, "Tiedown Anchors", subsection "Measurement And Payment" the third paragraph is revised as follows:

"The contract unit price paid for tiedown anchor shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in constructing the tiedown anchors(including establishing the creep characteristics of the anchorage and strand, and testing), complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Special Provisions, Section 10-1.25, "Concrete Structures", the following paragraph is added after the second paragraph as follows:

"When a roughened concrete surface is shown on the plans, the existing concrete surface shall be roughened to a full amplitude of approximately 1/4-inch by abrasive blasting, water blasting or mechanical equipment."

In the Special Provisions, Section 10-1.25, "Concrete Structures", the eighteenth paragraph is revised as follows:

"CONSTRUCTION METHODS.--The concrete for the new exterior and interior pier walls which are in contact with existing concrete shall either be placed at a continuous rate not to exceed 4 vertical feet per hour, or be placed on lifts not exceeding 15 feet in height. Such concrete shall be reconsolidated after placement. Reconsolidation shall be performed throughout the entire depth of placement, as late as such concrete will again respond to vibration, but not sooner than 30 minutes after initial vibration."

In the Special Provisions, Section 10-1.25, "Concrete Structures", subsection "Measurement And Payment" the following paragraph is added after the third paragraph as follows:

"Full compensation for roughening existing concrete surfaces to a full amplitude of approximately 1/4", where shown on the plans, shall be considered as included in the contract price paid per cubic yard for structural concrete, bridge and no separate payment will be made therefor."

In the Special Provisions, Section 10-1.26, "Furnish Seismic Isolator Bearing", subsection "Materials And Fabrication" the fifth paragraph is revised as follows:

"Cleaning and Painting Steel.-- Metal surfaces of bearings exposed to the atmosphere in the completed work, except stainless steel surfaces, shall be cleaned and painted prior to erection with waterborne inorganic zinc primer in accordance with the provisions in "Clean and Paint Structural Steel," elsewhere in these special provisions and the following:

Finish coats are not required.

Painted surfaces damaged or burned during installation and all areas where mudcracking occurs in the inorganic zinc primer shall be blast cleaned and repainted with inorganic zinc primer to the specified thickness."

In the Special Provisions, Section 10-1.26, "Furnish Seismic Isolator Bearing", subsection "Alternative Bearing" the sixth subparagraph of the seventy-fourth paragraph is revised as follows:

"Computer models of the structure in IAI-NEABS and ADINA format and site specific acceleration and displacement time histories are available to the Contractor as provided in Section 2-1.03, Examination of Plans, Specifications, Contract, and Site of Work," of the Standard Specifications."

In the Special Provisions, Sections 2-1.08, "Escrow Of Bid Documentation", 5-1.39, "Tidal Conditions And Elevation Datum", 5-1.40, "Sound Control Requirements", 5-1.41, "Contaminated Material, General", are added as attached.

In the Proposal and Contract the "Disputes Review Board Agreement" is deleted.

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.
- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch

Attachments

Office of Office Engineer

5-1.17 DISPUTES REVIEW BOARD

To assist in the resolution of disputes or potential claims arising out of the work of this project, a Disputes Review Board, hereinafter referred to as the "DRB", shall be established by the Engineer and Contractor cooperatively upon approval of the contract. The DRB is intended to assist the contract administrative claims resolution process as set forth in the provisions of Section 9-1.04, "Notice of Potential Claim," and Section 9-1.07B, "Final Payment and Claims," of the Standard Specifications, as amended elsewhere in these special provisions. The DRB shall not be considered to serve as a substitute for any requirements in the specifications in regard to filing of potential claims. The requirements and procedures established in this special provision shall be considered as an essential prerequisite to filing a claim, for arbitration or for litigation prior or subsequent to project completion.

The DRB shall be utilized when dispute or potential claim resolution at the job level is unsuccessful. The DRB shall function until the day of acceptance of the contract, at which time the work of the DRB will cease except for completion of unfinished dispute hearings and reports. After acceptance of the contract any disputes or potential claims that the Contractor wants to pursue that have not been settled, shall be stated or restated, by the Contractor, in response to the Proposed Final Estimate within the time limits provided in Section 9-1.07B, "Final Payment and Claims," of the Standard Specifications, as amended elsewhere in these special provisions. The State will review those claims in accordance with Section 9-1.07B, of the Standard Specifications, as amended. Following the completion of the State's administrative claims procedure, the Contractor may resort to arbitration as provided in Section 9-1.10, "Arbitration," of the Standard Specifications.

Disputes, as used in this section, shall include all differences of opinion, properly noticed as provided hereinafter, between the State and Contractor on matters related to the work and other subjects considered by the State or Contractor, or by both, to be of concern to the DRB on this project, except matters relating to Contractor, subcontractor or supplier claims not actionable against the State as specified in these special provisions. Whenever the term "dispute" or "disputes" is used herein, it shall be deemed to include potential claims as well as disputes.

The DRB shall serve as an advisory body to assist in the resolution of disputes between the State and the Contractor, hereinafter referred to as the "parties". The DRB shall consider disputes referred to it, and furnish written reports containing findings and recommendations pertaining to those disputes, to the parties to aid in resolution of the differences between them. DRB findings and recommendations are not binding on the parties.

The DRB shall consist of one member selected by the State, one member selected by the Contractor, and a third member selected by the first two members and approved by both the State and the Contractor. The third member shall act as DRB Chairperson.

The first two DRB members shall select a third DRB member subject to the mutual approval of the parties, or may mutually concur on a list of potentially acceptable third DRB members and submit the list to the parties for final selection and approval of the third member. The goal in selection of the third member is to complement the professional experience of the first two members, and to provide leadership for the DRB's activities.

No DRB member shall have prior direct involvement in this contract, and no member shall have a financial interest in this contract or the parties thereto, within a period of 6 months prior to award of this contract, or during the contract, except as follows:

1. Compensation for services on this DRB.
2. Ownership interest in a party or parties, documented by the prospective DRB member, that has been reviewed and determined in writing by the State to be sufficiently insignificant to render the prospective member acceptable to the State.
3. Service as a member of other Disputes Review Boards on other contracts.
4. Retirement payments or pensions received from a party that are not tied to, dependent on or affected by the net worth of the party.
5. The above provisions apply to any party having a financial interest in this contract; including but not limited to contractors, subcontractors, suppliers, consultants, and legal and business services.

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REPLACED PER ADDENDUM NO. 1 DATED DECEMBER 23, 1997

DRB members shall be especially knowledgeable in the type of construction and contract documents potentially anticipated by the contract, and shall discharge their responsibilities impartially and as an independent body considering the facts and circumstances related to the matters under consideration, applicable laws and regulations, and the pertinent provisions of the contract.

The State and the Contractor shall select their respective DRB members, in accordance with the terms and conditions of the Disputes Review Board Agreement and these provisions, within 45 days of the approval of the contract. Each party shall provide written notification to the other of the name of their selected DRB member along with the prospective member's written disclosure statement.

Before their appointments are final, the first two prospective DRB members shall submit complete disclosure statements to both the State and the Contractor. The statement shall include a resume of the prospective member's experience, together with a declaration describing all past, present and anticipated or planned future relationships, including indirect relationships through the prospective member's primary or full-time employer, to this project and with all parties involved in this construction contract; including, but not limited to, any relevant subcontractors or suppliers to the parties, the parties' principals or the parties' counsel. The DRB members shall also include a full disclosure of close professional or personal relationships with all key members of all parties to the contract. Either the Contractor or the State may object to the others nominee and that person will not be selected for the DRB. No reason need be given for the first objection. Objections to subsequent nominees must be based on a specific breach or violation of nominee responsibilities under this specification. A different person shall then be nominated within 14 Days. The third DRB member shall supply a full disclosure statement to the first two DRB members and to the parties prior to appointment. Either party may reject any of the three prospective DRB members who fail to fully comply with all required employment and financial disclosure conditions of DRB membership as described in the Disputes Review Board Agreement and elsewhere herein. A copy of the Disputes Review Board Agreement is included in this special provision.

The first duty of the State and Contractor selected members of the DRB is to select and recommend prospective third member(s) to the parties for final selection and approval. The first two DRB members shall proceed with the selection of the third DRB member immediately upon receiving written notification from the State of their selection, and shall provide their recommendation simultaneously to the parties within 21 days of the notification.

An impasse shall be considered to have been reached if the parties are unable to approve a third member within 14 days of receipt of the recommendation of the first two DRB members, or if the first two members are unable to agree upon a recommendation within the 14 day time limit allowed in the preceding paragraph. In the event of an impasse in selection of the third DRB member, the State and the Contractor shall each propose three candidates for the third position. The parties shall select all candidates proposed under this paragraph from the current list of arbitrators certified by the Public Works Contract Arbitration Committee created by Article 7.2 (commencing with Section 10245) of the State Contract Act. The first two DRB members shall then select one of the 6 proposed candidates in a blind draw.

The Contractor, the State, and all three members of the DRB shall complete and adhere to the Disputes Review Board Agreement in administration of this DRB within 14 days of the parties' concurrence in the selection of the third member. The State authorizes the Engineer to execute and administer the terms of the Agreement. The person(s) designated by the Contractor as authorized to execute Contract Change Orders shall be authorized to execute and administer the terms of this agreement, or to delegate the authority in writing. The operation of the DRB shall be in conformance with the terms of the Disputes Review Board Agreement.

The State and the Contractor shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,000.00 per day if time spent per meeting, including all on-site time plus one hour of travel time, is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$600.00 per day if time spent per meeting, including all on-site time plus one hour of travel time, is less than or equal to four hours. The agreed rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel and incidentals for each day, or portion thereof, that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time, (such as time spent evaluating and preparing recommendations on specific issues presented to the DRB), has been specifically agreed to in advance by the State and Contractor. Time away from the project, that has been specifically agreed to in advance by the parties, will be compensated at an agreed rate of \$100.00 per hour. The agreed amount of \$100.00 per hour shall include all incidentals including any expenses for telephone, fax and computer services. Members serving on more than one

DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project. The State will provide, at no cost to the Contractor, administrative services such as conference facilities and secretarial services to the DRB. These special provisions and the Disputes Review Board Agreement state provisions for compensation and expenses of the DRB. All DRB members shall be compensated at the same daily and hourly rate. The Contractor shall make direct payments to each DRB member for their participation in authorized meetings and approved hourly rate charges from invoices submitted by each DRB member. The State will reimburse the Contractor for its share of the costs. There will be no markups applied to any expenses connected with the DRB, either by the DRB members or by the Contractor when requesting payment of the State's share of DRB expenses.

Service of a DRB member may be terminated at any time with not less than 14 days notice as follows:

1. The State may terminate service of the State appointed member.
2. The Contractor may terminate service of the Contractor appointed member.
3. Upon the written recommendation of the State and Contractor members for the removal of the third member.
4. Upon resignation of a member.

When a member of the DRB is replaced, the replacement member shall be appointed in the same manner as the replaced member was appointed. The appointment of a replacement DRB member will begin promptly upon determination of the need for replacement and shall be completed within 14 days. Changes in either of the DRB members chosen by the two parties will not require re-selection of the third member, unless both parties agree to such re-selection in writing. The Disputes Review Board Agreement shall be amended to reflect the change of a DRB member.

The following procedure shall be used for dispute resolution:

1. If the Contractor objects to any decision, act or order of the Engineer, the Contractor shall give written notice of potential claim as specified in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications, as amended elsewhere in these special provisions, including provision of applicable cost documentation; or file written protests or notices pursuant to Sections 4-1.03A, "Procedure and Protest", 8-1.06, "Time of Completion", 8-1.07, "Liquidated Damages", or 8-1.10, "Utility and Non-Highway Facilities" of the Standard Specifications.
2. The Engineer will respond, in writing, to the Contractor's written protest or notice within 14 days of receipt of the written protest or notice.
3. Within 14 days after receipt of the Engineer's written response, the Contractor shall, if the Contractor still objects, file a written reply with the Engineer, stating clearly and in detail the basis of the objection.
4. Following the Contractor's objection to the Engineer's decision, the Contractor shall refer the dispute to the DRB if the Contractor wishes to further pursue the objection to the Engineer's decision. The Contractor shall make the referral in writing to the DRB, simultaneously copied to the State, within 21 days after receipt of the written reply from the Engineer. The written dispute referral shall describe the disputed matter in individual discrete segments so that it will be clear to both parties and the DRB what discrete elements of the dispute have been resolved, and which remain unresolved.
5. The Contractor, by failing to submit the written notice of referral of the matter to the DRB within 21 days after receipt of the State's written reply, waives any future claims on the matter in contention.
6. The Contractor and the State shall each be afforded an opportunity to be present and to be heard by the DRB, and to offer evidence. Either party furnishing any written evidence or documentation to the DRB must furnish copies of such information to the other party a minimum of 14 days prior to the date the DRB is scheduled to convene the hearing for the dispute. Either party shall produce such additional evidence as the DRB may deem necessary to reach an understanding and determination of the dispute. The party furnishing additional evidence shall furnish copies of such additional evidence to the other party at the same time the evidence is provided to the DRB. The DRB will not consider any evidence not furnished in accordance with the terms specified herein.

7. The DRB shall furnish a report, containing findings and recommendations as described in the Disputes Review Board Agreement, in writing to both the State and the Contractor. The DRB shall complete its reports, including minority opinion if any, and submit them to the parties within 30 days of the DRB hearing, except that time extensions may be granted at the request of the DRB with the written concurrence of both parties. The report shall include the facts and circumstances related to the matters under consideration, applicable laws and regulations, the pertinent provisions of the Contract and the actual costs and time incurred as shown on the Contractor's cost accounting records.
8. Within 30 days after receiving the DRB's report, both the State and the Contractor shall respond to the DRB in writing signifying that the dispute is either resolved or remains unresolved. Failure to provide the written response within the time specified, or a written rejection of the DRB's recommendation presented in the report by either party, shall conclusively indicate that the party(s) failing to respond accepts the DRB recommendation. Immediately after responses have been received by both parties, the DRB will provide copies of both responses to the parties simultaneously. Either party may request clarification of elements of the DRB's report from the DRB prior to responding to the report. The DRB will consider any clarification request only if submitted within 10 days of receipt of the DRB's report, and if submitted simultaneously in writing to both the DRB and the other party. Each party may submit only one request for clarification for any individual DRB report. The DRB shall respond, in writing, to requests for clarification within 10 days of receipt of such requests.
9. The DRB's recommendations, stated in the DRB's reports, are not binding on either party. Either party may seek a reconsideration of a recommendation of the DRB. The DRB shall only grant a reconsideration based upon submission of new evidence and if the request is submitted within the 30 day time limit specified for response to the DRB's written report. Each party may submit only one request for reconsideration regarding any individual DRB recommendation.
10. If the State and the Contractor are able to resolve their dispute with the aid of the DRB's report, the State and Contractor shall promptly accept and implement the recommendations of the DRB.
11. The State or the Contractor shall not call members who served on the DRB for this contract as witnesses in arbitration proceedings which may arise from this contract, and all documents created by the DRB shall be inadmissible as evidence in subsequent arbitration proceedings, except the DRB's final written reports on each issue brought before it..
12. The State and Contractor shall jointly indemnify and hold harmless the DRB members from and against all claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of and resulting from the findings and recommendations of the DRB.
13. The DRB members shall have no claim against the State or the Contractor, or both, from any claimed harm arising out of the parties' evaluations of the DRB's report.

Disputes Involving Subcontractor Claims.—For purposes of this section, a "subcontractor claim" shall include any claim by a subcontractor (including also any pass through claims by a lower tier subcontractor or supplier) against the Contractor that is actionable by the Contractor against the Department which arises from the work, services, or materials provided or to be provided in connection with the contract. If the Contractor determines to pursue a dispute against the Department that includes a subcontractor claim, the dispute shall be processed and resolved in accordance with these special provisions and in accordance with the following:

1. The Contractor shall identify clearly in all submissions pursuant to this section, that portion of the dispute that involves a subcontractor claim or claims.
2. The Contractor shall include, as part of its submission pursuant to Step 4 above, a certification (False Claims Act Certification) by the subcontractor's or supplier's officer, partner, or authorized representative with authority to bind the subcontractor and with direct knowledge of the facts underlying the subcontractor claim. The Contractor also shall submit a certification that the subcontractor claim is acknowledged and forwarded by the Contractor. The form for these certifications are available from the Engineer.
3. At any DRB meeting on a dispute that includes one or more subcontractor claims, the Contractor shall require that each subcontractor that is involved in the dispute have present an authorized representative with actual knowledge of the facts underlying the subcontractor claim to assist in presenting the subcontractor claim and to answer questions raised by the DRB members or the Department's representatives.

4. Failure by the Contractor to declare a subcontractor claim on behalf of its subcontractor (including lower tier subcontractors' and suppliers' pass through claims) at the time of submission of the Contractor's claims, as provided hereunder, shall constitute a release of the Department by the Contractor on account of such subcontractor claim.
5. The Contractor shall include in all subcontracts under this contract that subcontractors and suppliers of any tier (a) agree to submit subcontractor claims to the Contractor in a proper form and in sufficient time to allow processing by the Contractor in accordance with the Dispute Review Board resolution specifications; (b) agree to be bound by the terms of the Dispute Review Board provisions to the extent applicable to subcontractor claims; (c) agree that, to the extent a subcontractor claim is involved, completion of all steps required under these Dispute Review Board special provisions shall be a condition precedent to pursuit by the subcontractor of any other remedies permitted by law, including without limitation of a lawsuit against the Contractor; and (d) agree that the existence of a dispute resolution process for disputes involving subcontractor claims shall not be deemed to create any claim, right, or cause of action by any subcontractor or supplier against the Department.

Notwithstanding the foregoing, this Dispute Review Board special provision shall not apply to, and the DRB shall not have the authority to consider, any subcontractor claim between the subcontractor(s) or supplier(s) and the Contractor that is not actionable by the Contractor against the Department.

A copy of the "Disputes Review Board Agreement" to be executed by the Contractor, State and the three DRB members after approval of the contract follows:

DISPUTES REVIEW BOARD AGREEMENT

(Contract Identification)

Contract No. _____

THIS DISPUTES REVIEW BOARD AGREEMENT, hereinafter called "AGREEMENT", made and entered into this _____ day of _____, _____, between the State of California, acting through the California Department of Transportation and the Director of Transportation, hereinafter called the "STATE"; _____ hereinafter called the "CONTRACTOR"; and the Disputes Review Board, hereinafter called the "DRB" consisting of the following members:

_____,
(Contractor Appointee)

_____,
(State Appointee)

and _____
(Third Person)

WITNESSETH, that

WHEREAS, the STATE and the CONTRACTOR, hereinafter called the "parties", are now engaged in the construction on the State Highway project referenced above; and

WHEREAS the special provisions for the above referenced contract provides for the establishment and operation of the DRB to assist in resolving disputes; and

WHEREAS, the DRB is composed of three members, one selected by the STATE, one selected by the CONTRACTOR, and the third member selected by the other two members and approved by the parties;

NOW THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the STATE, the CONTRACTOR, and the DRB members hereto agree as follows:

I DESCRIPTION OF WORK

To assist in the resolution of disputes between the parties, the contract provides for the establishment and the operation of the DRB. The intent of the DRB is to fairly and impartially consider disputes placed before it and provide written recommendations for resolution of these disputes to both parties. The members of this DRB shall perform the services necessary to participate in the DRB's actions as designated in Section II, Scope of Work.

II SCOPE OF WORK

The scope of work of the DRB includes, but is not limited to, the following:

A. Objective

The principal objective of the DRB is to assist in the timely resolution of disputes between the parties arising from performance of this contract. It is not intended for either party to default on their normal responsibility to amicably and fairly settle their differences by indiscriminately assigning them to the DRB. It is intended that the mere existence of the DRB will encourage the parties to resolve disputes without resorting to this review procedure. But when a dispute which is serious enough to warrant the DRB's review does develop, the process for prompt and efficient action will be in place.

B. Procedures

The DRB shall render written reports on disputes between the parties arising from the construction contract. Prior to consideration of a dispute, the DRB shall establish rules and regulations that will govern the conduct of its business and reporting procedures in accordance with the requirements of the contract and the terms of this AGREEMENT. DRB recommendations, resulting from its consideration of a dispute, shall be furnished in writing to both parties. The recommendations shall be based on the pertinent contract provisions, and the facts and circumstances involved in the dispute. The recommendations shall find one responsible party in a dispute; shared or "jury" determinations shall not be rendered.

The DRB shall refrain from officially giving any advice or consulting services to anyone involved in the contract. The individual members shall act in a completely independent manner and while serving as members of the DRB shall have no consulting business connections with either party or its principals or attorneys or any other affiliates (subcontractors, suppliers, etc.) who have a beneficial interest in the contract.

During scheduled meetings of the DRB as well as during dispute hearings, DRB members shall refrain from expressing opinions on the merits of statements on matters under dispute or potential dispute. Opinions of DRB members expressed in private sessions shall be kept strictly confidential. Individual DRB members shall not meet with, or discuss contract issues with individual parties, except as directed by the DRB Chairperson. Any such discussions or meetings shall be disclosed to both parties. Any other discussions regarding the project between the DRB members and the parties shall be in the presence of all three members and both parties. Individual DRB members shall not undertake independent investigations of any kind pertaining to disputes or potential disputes, except with the knowledge of both parties and as expressly directed by the DRB Chairperson.

C. Construction Site Visits, Progress Meetings and Field Inspections

The DRB members shall visit the project site and meet with representatives of the parties to keep abreast of construction activities and to develop familiarity with the work in progress. All scheduled progress meetings shall be held at or near the job site. The DRB shall meet at least once at the start of the project, and at least once every

six months thereafter. The frequency, exact time, and duration of additional site visits and progress meetings shall be as recommended by the DRB and approved by the parties consistent with the construction activities or matters under consideration and dispute. Each meeting shall consist of a round table discussion and a field inspection of the work being performed on the contract, if necessary. Each meeting shall be attended by representatives of both parties. The agenda shall generally be as follows:

1. Meeting opened by the DRB Chairperson.
2. Remarks by the STATE's representative.
3. A description by the CONTRACTOR's representative of work accomplished since the last meeting; the current schedule status of the work; and a forecast for the coming period.
4. An outline by the CONTRACTOR's representative of potential problems and a description of proposed solutions.
5. An outline by the STATE's representative of the status of the work as the STATE views it.
6. A brief description by the CONTRACTOR's or STATE's representative of potential claims or disputes which have surfaced since the last meeting.
7. A summary by the STATE's representative, the CONTRACTOR's representative, or the DRB of the status of past disputes and claims.

The STATE's representative will prepare minutes of all regular meetings and circulate them for revision and approval by all concerned.

The field inspection shall cover all active segments of the work, the DRB being accompanied by both parties' representatives. The field inspection may be waived upon mutual agreement of the parties.

D. DRB Consideration and Handling of Disputes

Upon receipt by the DRB of a written referral of a dispute, the DRB shall convene to review and consider the dispute. The DRB shall determine the time and location of DRB hearings, with due consideration for the needs and preferences of the parties while recognizing the paramount importance of speedy resolution of issues. If the matter is not urgent, it may be scheduled for the time of the next scheduled DRB visit to the project. For an urgent matter, and upon the request of either party, the DRB shall meet at its earliest convenience.

Normally, hearings shall be conducted at or near the project site. However, any location which would be more convenient and still provide all required facilities and access to necessary documentation shall be satisfactory.

Both parties shall be given the opportunity to present their evidence at these hearings. It is expressly understood that the DRB members are to act impartially and independently in the consideration of the contract provisions, and the facts and conditions surrounding any dispute presented by either party, and that the recommendations concerning any such dispute are advisory and nonbinding on the parties.

The DRB may request that written documentation and arguments from both parties be sent to each DRB member, through the DRB Chairperson, for review before the hearing begins. A party furnishing any written documentation to the DRB shall furnish copies of such information to the other party at the same time that such information is supplied to the DRB.

DRB hearings shall be informal. There shall be no testimony under oath or cross-examination. There shall be no reporting of the procedures by a shorthand reporter or by any electronic means. Documents and verbal statements shall be received by the DRB in accordance with acceptance standards established by the DRB. Said standards need not comply with prescribed legal laws of evidence.

The third DRB member shall act as Chairperson for dispute hearings and all other DRB activities. The parties shall have a representative at all hearings. Failure to attend a duly noticed meeting by either of the parties shall be conclusively considered by the DRB as indication that the non-attending party considers any written submittals as their entire and complete argument. The claimant shall discuss the dispute, followed by the other party. Each party shall then be allowed one or more rebuttals until all aspects of the dispute are thoroughly covered. DRB members may ask questions, seek clarification, or request further data from either of the parties. The DRB may request from either party documents or information that would assist the DRB in making its findings and recommendations including, but not limited to, documents used by the CONTRACTOR in preparing the bid for the project. A refusal by a party to provide information requested by the DRB may be considered by the DRB as an indication that the requested material would tend to disprove that party's position. Claims shall not necessarily be computed by merely

subtracting bid price from the total cost of the affected work. However, if any claims are based on the "total cost method", then, to be considered by the DRB, they shall be supported by evidence furnished by the CONTRACTOR that (1) the nature of the dispute(s) makes it impossible or impracticable to determine cost impacts with a reasonable degree of accuracy, (2) the CONTRACTOR's bid estimate was realistic, (3) the CONTRACTOR's actual costs were reasonable, and (4) the CONTRACTOR was not responsible for the added expenses. As to any claims based on the CONTRACTOR's field or home office accounting records, those claims shall be supported by an audit report of an independent Certified Public Accountant unless the contract includes special provisions that provide for an alternative method to calculate unabsorbed home office overhead. Any of those claims shall also be subject to audit by the DRB with the concurrence of the parties. In large or complex cases, additional hearings may be necessary in order to consider all the evidence presented by both parties. All involved parties shall maintain the confidentiality of all documents and information, as provided in this AGREEMENT.

During dispute hearings, no DRB member shall express an opinion concerning the merit of any facet of the case. All DRB deliberations shall be conducted in private, with all interim individual views kept strictly confidential.

After hearings are concluded, the DRB shall meet in private and reach a conclusion supported by two or more members. Private sessions of the DRB may be held at a location other than the job site or by electronic conferencing as deemed appropriate, in order to expedite the process.

The DRB's findings and recommendations, along with discussion of reasons therefor, shall then be submitted as a written report to both parties. Recommendations shall be based on the pertinent contract provisions, applicable laws and regulations, and facts and circumstances related to the dispute. The report shall be thorough in discussing the facts considered, the contract language, law or regulation viewed by the DRB as pertinent to the issues, and the DRB's interpretation and philosophy in arriving at its conclusions and recommendations. The DRB's report shall stand on its own, without attachments or appendices. The DRB chairman shall complete and furnish a summary report to the DRB Program Manager, Construction Program, M.S. 44, P.O. Box 942874, Sacramento, CA 94274.

With prior written approval of both parties, the DRB may obtain technical services necessary to adequately review the disputes presented; including audit, geotechnical, schedule analysis and other services. The parties' technical staff may supply those services as appropriate. The cost of any technical services, as agreed to by the parties, shall be borne equally by the two parties as specified in an approved contract change order. The CONTRACTOR will not be entitled to markups for the payments made for these services.

The DRB shall resist submittal of incremental portions of information by either party, in the interest of making a fully-informed decision and recommendation.

The DRB shall make every effort to reach a unanimous decision. If this proves impossible, the dissenting member shall prepare a minority opinion, which shall be included in the DRB's report.

Although both parties should place weight upon the DRB's recommendations, they are not binding. Either party may appeal a recommendation to the DRB for reconsideration. However, reconsideration shall only be allowed when there is new evidence to present, and the DRB shall accept only one appeal from each party pertaining to any individual DRB recommendation. The DRB shall hear appeals in accordance with the terms described in the Section entitled "Disputes Review Board" in the special provisions.

E. DRB Member Replacement

Should the need arise to appoint a replacement DRB member, the replacement DRB member shall be appointed in the same manner as the original DRB members were appointed. The selection of a replacement DRB member shall begin promptly upon notification of the necessity for a replacement and shall be completed within 14 days. This AGREEMENT will be amended to indicate change in DRB membership.

III CONTRACTOR RESPONSIBILITIES

The CONTRACTOR shall furnish to each DRB member one copy of all pertinent documents which are or may become necessary for the DRB to perform their function. Pertinent documents are any drawings or sketches, calculations, procedures, schedules, estimates, or other documents which are used in the performance of the work or in justifying or substantiating the CONTRACTOR's position. The CONTRACTOR shall also furnish a copy of such pertinent documents to the STATE, in accordance with the terms outlined in the special provisions.

IV STATE RESPONSIBILITIES

The STATE will furnish the following services and items:

A. Contract Related Documents

The STATE will furnish to each DRB member one copy of Notice to Contractors and Special Provisions, Proposal and Contract, Plans, Standard Specifications, and Standard Plans, change orders, written instructions issued by the STATE to the CONTRACTOR, or other documents pertinent to any dispute that has been referred to the DRB and necessary for the DRB to perform its function.

B. Coordination and Services

The STATE, through the Engineer, will, in cooperation with the CONTRACTOR, coordinate the operations of the DRB. The Engineer will arrange or provide conference facilities at or near the project site and provide secretarial and copying services to the DRB without charge to the CONTRACTOR.

V TIME FOR BEGINNING AND COMPLETION

Once established, the DRB shall be in operation until the day of acceptance of the contract. The DRB members shall not begin any work under the terms of this AGREEMENT until authorized in writing by the STATE.

VI PAYMENT

A. All Inclusive Rate Payment

The STATE and the CONTRACTOR shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,000.00 per day if time spent per meeting, including all on-site time plus one hour of travel time, is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$600.00 per day if time spent per meeting, including all on-site time plus one hour of travel time, is less than or equal to four hours. The agreed rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel and incidentals for each day, or portion thereof, that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time has been specifically agreed to in advance by the STATE and CONTRACTOR. Time away from the project, that has been specifically agreed to in advance by the parties, will be compensated at an agreed rate of \$100.00 per hour. The agreed amount of \$100.00 per hour shall include all incidentals including any expenses for telephone, fax and computer services. Members serving on more than one DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project. The STATE will provide, at no cost to the CONTRACTOR, administrative services such as conference facilities and secretarial services to the DRB.

B. Payments

All DRB members shall be compensated at the same rate. The CONTRACTOR shall make direct payments to each DRB member for their participation in authorized meetings and approved hourly rate charges from invoices submitted by each DRB member. The STATE will reimburse the CONTRACTOR for its share of the costs of the DRB.

The DRB members may submit invoices to the CONTRACTOR for partial payment for work performed and services rendered for their participation in authorized meetings not more often than once per month during the progress of the work. The invoices shall be in a format approved by the parties and accompanied by a general

description of activities performed during that billing period. Payment for any hourly fees, at the agreed rate, shall not be paid to a DRB member until the amount and extent of those fees are approved by the STATE and CONTRACTOR.

Invoices shall be accompanied by original supporting documents, which the CONTRACTOR shall include with the extra work billing when submitting for reimbursement of the STATE's share of cost from the STATE. The CONTRACTOR will be reimbursed for one-half of approved costs of the DRB. No markups will be added to the CONTRACTOR's payment.

C. Inspection of Costs Records

The DRB members and the CONTRACTOR shall keep available for inspection by representatives of the STATE and the United States, for a period of three years after final payment, the cost records and accounts pertaining to this AGREEMENT. If any litigation, claim, or audit arising out of, in connection with, or related to this contract is initiated before the expiration of the three-year period, the cost records and accounts shall be retained until such litigation, claim, or audit involving the records is completed.

VII ASSIGNMENT OF TASKS OF WORK

The DRB members shall not assign any of the work of this AGREEMENT.

VIII TERMINATION OF AGREEMENT, THE DRB, AND DRB MEMBERS

DRB members may resign from the DRB by providing not less than 14 days written notice of the resignation to the STATE and CONTRACTOR. DRB members may be terminated by their original appointing power, in accordance with the terms of the contract.

IX LEGAL RELATIONS

The parties hereto mutually understand and agree that the DRB member in the performance of duties on the DRB, is acting in the capacity of an independent agent and not as an employee of either party.

No party to this AGREEMENT shall bear a greater responsibility for damages or personal injury than is normally provided by Federal or State of California Law.

Notwithstanding the provisions of this contract that require the CONTRACTOR to indemnify and hold harmless the STATE, the parties shall jointly indemnify and hold harmless the DRB members from and against all claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of and resulting from the findings and recommendations of the DRB.

X CONFIDENTIALITY

The parties hereto mutually understand and agree that all documents and records provided by the parties in reference to issues brought before the DRB, which documents and records are marked "Confidential - for use by the DRB only", shall be kept in confidence and used only for the purpose of resolution of subject disputes, and for assisting in development of DRB findings and recommendations; that such documents and records will not be utilized or revealed to others, except to officials of the parties who are authorized to act on the subject disputes, for any purposes, during the life of the DRB. Upon termination of this AGREEMENT, said confidential documents and records, and all copies thereof, shall be returned to the parties who furnished them to the DRB. However, the parties understand that such documents shall be subsequently discoverable and admissible in court or arbitration proceedings unless a protective order has been obtained by the party seeking further confidentiality.

**XI
DISPUTES**

Any dispute between the parties hereto, including disputes between the DRB members and either party or both parties, arising out of the work or other terms of this AGREEMENT, which cannot be resolved by negotiation and mutual concurrence between the parties, or through the administrative process provided in the contract, shall be resolved by arbitration as provided in Section 9-1.10, "Arbitration," of the Standard Specifications.

**XII
VENUE, APPLICABLE LAW, AND PERSONAL JURISDICTION**

In the event that any party, including an individual member of the DRB, deems it necessary to institute arbitration proceedings to enforce any right or obligation under this AGREEMENT, the parties hereto agree that any such action shall be initiated in the Office of Administrative Hearings of the State of California. The parties hereto agree that all questions shall be resolved by arbitration by application of California law and that the parties to such arbitration shall have the right of appeal from such decisions to the Superior Court in accordance with the laws of the State of California. Venue for the arbitration shall be Sacramento or any other location as agreed to by the parties.

**XIII
FEDERAL REVIEW AND REQUIREMENTS**

On Federal-Aid contracts, the Federal Highway Administration shall have the right to review the work of the DRB in progress, except for any private meetings or deliberations of the DRB.

All other Federal requirements in this agreement shall only apply to Federal-Aid contracts.

**XIV
CERTIFICATION OF THE CONTRACTOR,
THE DRB MEMBERS, AND THE STATE**

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT as of the day and year first above written.

DRB MEMBER

By: _____

Title: _____

DRB MEMBER

By : _____

Title : _____

CONTRACTOR

By: _____

Title: _____

DRB MEMBER

By: _____

Title : _____

CALIFORNIA STATE DEPARTMENT
OF TRANSPORTATION

By: _____

Title: _____

5-1.28 OVERHEAD

The Contractor will be compensated for overhead in accordance with these special provisions.

Attention is directed to "Force Account Payment" and "Progress Schedule (Critical Path)" of these special provisions.

Section 9-1.08, "Adjustment of Overhead Costs," of the Standard Specifications shall not apply.

Time related overhead shall consist of those overhead costs, including field and home office overhead, that are in proportion to the time required to complete the work.

The quantity of time related overhead to be measured for payment will be the number of working days specified in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, adjusted only as a result of suspensions and adjustments of time which revise the current contract completion date and which are also any of the following:

- 1) suspensions of work ordered in accordance with Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications, except:
 - a) suspensions ordered due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the contract; and
 - b) suspensions ordered due to unsuitable weather conditions;
- 2) extensions of time granted by the State in accordance with the provisions of the fifth paragraph of Section 8-1.07, "Liquidated Damages," of the Standard Specifications; or
- 3) reductions in contract time set forth in approved contract change orders, in accordance with Section 4-1.03, "Changes," of the Standard Specifications.

The contract price paid for time related overhead shall include full compensation for time related overhead measured for payment as specified above, incurred by the Contractor and by any joint venture partner, subcontractor, supplier or other party associated with the Contractor.

No adjustment in compensation will be made for any increase or decrease in the quantities of time related overhead required, regardless of the reason for the increase or decrease. The provisions in Sections 4-1.03B, "Increased or Decreased Quantities" and 4-1.03C, "Changes in Character of the Work," of the Standard Specifications, shall not apply to time related overhead.

For progress payment purposes, the number of working days to be paid for time related overhead in each monthly estimate will be the number of working days specified above to be measured for payment that the Contractor performed work on the current controlling operation or operations as specified in Section 8-1.06, "Time of Completion," of the Standard Specifications. Working days specified above to be measured for payment, on which the Contractor did not perform work on the controlling operation or operations will be measured and included for payment in the first estimate made in accordance with Section 9-1.07, "Payment After Acceptance," of the Standard Specifications.

Full compensation for overhead other than time related overhead measured and paid for as specified above, and other than overhead costs for extra work performed pursuant to Section 4-1.03D of the Standard Specifications, shall be considered as included in the various items of work and no additional compensation will be allowed therefor.

SECTION 8-3. WELDING

8-3.01 WELDING ELECTRODES

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

8-3.02 WELDING QUALITY CONTROL

Welding quality control shall apply to the items of work described herein and shall conform to the requirements in the AWS welding codes, the Standard Specifications and these special provisions.

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:

AWS Code	Year of Adoption
D1.1	1996
D1.4	1992
D1.5	1995
D1.5 (metric only)	1996

All requirements of the AWS welding codes shall apply unless specified otherwise 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 ANSI/AASHTO/AWS.

Except for steel piling, welding performed anywhere other than at a permanent fabrication facility that is certified under the AISC Quality Certification Program, Category III, Major Steel Bridges, shall conform to the provisions for welding quality control as specified herein. Welding of steel piling shall conform to the provisions in "Piling" elsewhere in these special provisions and to the provisions for welding quality control specified herein.

The welding of all fracture critical members (FCMs) shall conform to the provisions specified in the Fracture Control Plan (FCP) and herein.

Unless otherwise specified, when any type of welding is performed on items of work including 1) steel piles, 2) bar reinforcement, 3) steel structures, 4) column casings and 5) miscellaneous metal, 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 all welding, including materials and workmanship, performed by the Contractor and all subcontractors.

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.

No welding inspection personnel or nondestructive testing (NDT) firms to be used in the work shall 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 shall be the sole individual responsible to the Contractor for submitting and receiving all correspondence and required submittals and reports regarding welding to and from the Engineer.

Prior to submitting the Quality Control Plan (QCP) required herein, a pre-welding meeting shall be held between the Engineer, Contractor and any welding subcontractors to be used in the work to discuss the requirements for the QCP.

Prior to performing any welding, the Contractor shall submit to the Engineer, in accordance with the provisions of Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate QCP for each item of work for which welding is to be performed. As a minimum, each QCP shall include the following:

1. The name of the welding firm and the NDT firm to be used;
2. A manual prepared by the NDT firm that shall include equipment, testing procedures, code of safe practices, the Written Practice of the NDT firm, and the names, qualifications and documentation of certifications for all personnel to be used;
3. The name of the QCM and the names, qualifications and documentation of certifications for all Quality Control (QC) Inspectors and Assistant Quality Control Inspectors to be used;
4. An organizational chart showing all QC personnel and their assigned QC responsibilities;

5. The methods and frequencies for performing all required quality control procedures, including QC inspection forms to be used, as required by the specifications including:
 - (a) all visual inspections;
 - (b) all NDT including radiographic geometry, penetrameter and shim selection, film quality, film processing, radiograph identification and marking system, and film interpretation and reports; and
 - (c) calibration procedures and calibration frequency for all NDT equipment;
6. A system for the identification and tracking of all welds, NDT and any required repairs, and a procedure for the reinspection of any repaired welds. The system shall have provisions for 1) permanently identifying each weld and the person who performed the weld and 2) placing all identification and tracking information on each radiograph;
7. Standard procedures for performing noncritical repair welds. Noncritical repair welds are defined as welds to deposit additional weld beads or layers to compensate for insufficient weld size and to fill limited excavations that were performed to remove unacceptable edge or surface discontinuities, rollover or undercut. The depth of these excavations shall not exceed 65 percent of the specified weld size;
8. The welding procedure specification (WPS), including documentation of all supporting Procedure Qualification Record (PQR) tests performed, and the name of the testing laboratory who performed the tests, to verify the acceptability of the WPS. The submitted WPS shall be within the allowable period of effectiveness;
9. Documentation of all certifications for welders for each weld process and position that will be used. Certifications shall list the electrodes used, test position, base metal and thickness, tests performed, and the witnessing authority. All certifications shall be within the allowable period of effectiveness; and
10. One copy each of all AWS welding codes and the FCP which are applicable to the welding to be performed. These codes and the FCP shall become the permanent property of the Department.

The Engineer shall have 10 working days to review the QCP submittal after a complete plan has been received. No welding shall be performed until the QCP is approved in writing by the Engineer. Should the Engineer fail to complete the review within this 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 reviewing the QCP, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

An amended QCP or addendum shall be submitted to, and approved in writing by the Engineer, for any proposed revisions to the approved QCP. An amended QCP or addendum will be required for any revisions to the QCP, including but not limited to a revised WPS, additional welders, changes in NDT firms or procedures, QC or NDT personnel, or updated systems for tracking and identifying welds. The Engineer shall have 3 working days to complete the review of the amended QCP or addendum. Work that is affected by any of the proposed revisions shall not be performed until the amended QCP or addendum has been approved. Should the Engineer fail to complete the review within this 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 reviewing the amended QCP or addendum, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

After final approval of the QCP, amended QCP or addendum, the Contractor shall submit to the Engineer 7 copies each of these approved documents.

A daily production log for welding shall be kept by the QCM for each day that welding is performed. The log shall clearly indicate the locations of all welding, and 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 Quality Control Inspector shall also be included in the log.

It is expressly understood that the Engineer's approval of the Contractor's QCP shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications. The Engineer's approval shall not constitute a waiver of any of the requirements of the plans and specifications nor relieve the Contractor of any obligation thereunder, and defective work, materials and equipment may be rejected notwithstanding approval of the QCP.

The following items shall be included in a Welding Report that is to be submitted to the Engineer within 7 days following the performance of any welding:

1. Reports of all visual weld inspections and NDT;
2. Radiographs and radiographic reports, and other required NDT reports;
3. Documentation that the Contractor has evaluated all radiographs and other nondestructive tests, corrected all rejectable deficiencies, and all repaired welds have been reexamined by the required NDT and found acceptable; and
4. Daily production log.

All reports regarding NDT, including radiographs, shall be signed by both NDT technician and the person that performed the review, and then submitted directly 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.

The Engineer shall review the Welding Report to determine if the Contractor is in conformance with the QCP. Except for steel piling, the Engineer shall be allowed 7 days to review the report and respond in writing after a complete Welding Report has been received. The review time for steel piling shall be as specified in "Piling" elsewhere in these special provisions. Prior to receiving notification from the Engineer of the Contractor's conformance with the QCP, the Contractor may encase in concrete or cover any welds for which a 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. Any material not conforming to these requirements will be subject to rejection. Should the Contractor elect to wait to encase or cover any welds pending notification by the Engineer, and should the Engineer fail to complete the review and provide notification within this 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 notification, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Sections 6.1.1 through 6.1.3.3 of AWS D 1.1, Sections 7.1.1 and 7.1.2 of AWS D 1.4, and Sections 6.1.1.1 through 6.1.3.3 of AWS D 1.5 are replaced with the following:

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

The Quality Control (QC) Inspector shall be the duly designated person who performs inspection, testing, and quality 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.

All QC Inspectors shall be responsible for quality control acceptance or rejection of materials and workmanship, and shall be currently certified as AWS Certified Welding Inspectors (CWI) in accordance with the provisions of AWS QC1, "Standard and Guide for Qualification 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 accordance with the provisions of AWS QC1, "Standard and Guide for Qualification of Welding Inspectors," or has equivalent qualifications. The QC Inspector shall monitor the Assistant QC Inspector's work, and shall be responsible for signing all reports.

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

Section 6.14.7, "Personnel Qualification," of AWS D 1.1, Section 7.7.6, "Personnel Qualification," of AWS D 1.4 and Section 6.1.3.4, "Personnel Qualification," of AWS D 1.5 are amended to read:

Personnel performing NDT shall be qualified in accordance with the current edition of the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A and the Written Practice of the NDT firm. Only individuals who are 1) qualified for NDT Level II, or 2) Level III technicians who have been directly certified by the ASNT and are authorized to perform the work of Level II technicians, shall perform NDT, review the results, and prepare the written reports.

Section 6.5.4, "Scope of Examination," of AWS D 1.1 and Section 7.5.4 of AWS D 1.4 are amended to read:

The QC Inspector shall inspect and approve the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved WPS are met.

Section 6.5.4 of AWS D 1.5 is amended to read:

The QC Inspector shall inspect and approve the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved WPS are met. The QC Inspector shall examine the work to make certain that it meets the requirements of section 3 and 9.21. The size and contour of welds shall be measured using suitable gages. Visual inspection for cracks in welds and base metal, and for other discontinuities should 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.

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

A sufficient number of QC Inspectors shall be provided to ensure continuous inspection when any welding is being performed. Continuous inspection, as a minimum, shall include (1) having QC Inspectors continually present on all shifts when any welding is being performed, or (2) having a QC Inspector within such close proximity of all welding operations that inspections by the QC Inspector of each operation, at each welding location, shall not lapse for a period exceeding 30 minutes.

Inspection and approval of the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day that welding is performed.

The QC Inspector shall provide reports to the QCM on a daily basis for each day that welding is performed.

Except for noncritical weld repairs, base metal repairs, or any other type of repairs not submitted in the QCP, the Engineer shall be notified immediately in writing when any welding problems or deficiencies are discovered and also of the proposed repair procedures to correct them. The Engineer shall have 5 working days to review these procedures. No remedial work shall begin until the repair procedures are approved in writing by the Engineer. Should the Engineer fail to complete the review within this 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 reviewing the proposed repair procedures, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

When joint details that are not prequalified by the applicable AWS codes are proposed for use in the work, all welders using these details shall perform a qualification test plate using the approved WPS variables and the joint detail to be used in production. The test plate shall be the maximum thickness to be used in production. The test plate shall be mechanically or radiographically tested as directed by the Engineer. Mechanical and radiographic testing and acceptance criteria shall be as specified in the applicable AWS codes.

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. 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 work remains satisfactory.

All qualification tests for welders, welding operators, and WPSs used in welding operations will be witnessed by the Engineer or an independent third party acceptable to the Engineer.

Section 6.6.5, "Nonspecified Nondestructive Testing Other Than Visual," of AWS D 1.1, Section 6.6.5 of AWS D 1.4 and Section 6.6.5 of AWS D 1.5 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 welding codes, in the Standard Specifications or in these special provisions. Additional NDT required by the Engineer, will be paid for as extra work in accordance with Section 4-1.03D, "Extra Work," of the Standard Specifications. Should any welding deficiencies be discovered by this additional NDT, the cost of the testing will not be paid for as extra work, and shall be at the Contractor's expense.

All required repair work to correct welding deficiencies, whether discovered by the required visual inspection or NDT, or by additional NDT directed by the Engineer, and any associated delays or expenses caused to the Contractor by performing these repairs, shall be at the Contractor's expense.

At the completion of all welding, the QCM shall sign and furnish to the Engineer, a certificate of compliance in accordance with 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 accordance with the details shown on the plans and the provisions of the Standard Specifications and these special provisions.

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

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10-1.02 ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM

The Contractor shall provide for the State's exclusive possession and use a complete electronic mobile daily diary computer system, to allow State personnel to record observation (diary) data in the field using Personal Digital Assistants (PDAs), and in the office using desktop workstation(s). Recorded data will be uploaded to a database maintained on an Oracle server. Diary information in the database shall be capable of being edited and printed in the form of an Engineer's Daily Report from desktop workstations connected to the database via a local area network. The system shall also provide other reports required by the Engineer, as well as user friendly and rapid retrieval of daily reports and other information from the database for research purposes.

The Engineer may use the furnished computer hardware, software, and instruction manual for any purposes related to the subject project. Before delivery and set up 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. 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 are pending and after the final estimate has been submitted to the Contractor.

The electronic mobile daily diary computer system furnished shall meet the requirements described below for function, data, hardware, and support.

FUNCTIONAL REQUIREMENTS.--The Contractor shall provide, not later than 11 days after contract award, a computer system that complies with the following minimum functional specifications:

DATA COLLECTION SUBSYSTEM.--

1. Accept input of observation data on a pen-based, hand-held computer (PDA).

General Data.--Allow input of data that applies to all observation data sets:

- a Inspector ID: agency-specific code; allow up to 10 alphanumeric characters.
- b Inspector password: general text field; allow up to 10 characters.
- c Inspector name: general text field; allow up to 30 characters.
- d Inspector title: general text field; allow up to 30 characters.

Daily Contract Observation Data.--Collect one or more contract observation data sets per contract per inspector per day:

- a Observation date: month, day & year.
- b Contract ID: agency-specific code; allow up to 15 alphanumeric characters.
- c Uniqueness guarantor: time and time of creation of the data set.
- d Weather condition, a.m. and p.m.: agency-specific code of up to 10 alphanumeric characters.
- e Temperature, high and low: signed numeric value of up to 3 digits (degrees Fahrenheit or Celsius).
- f Humidity, high and low: percentage value (0 to 100%).
- g Start and stop time for inspector shift (24-hour clock; values at the half hour).
- h Start and stop time for jobsite shift (24-hour clock; values at the half hour).
- i Level of inspection: values are "continuous", "intermittent" and "no inspection".
- j Inspector signature: digital image of signature.

Laborer Observation Data.--Collect multiple labor observations per observation data set:

- a Contract item or Contract Change Order (CCO): sequential number; allow up to 6 digits.
- b Contractor ID: agency-specific code; allow up to 10 alphanumeric characters.
- c Critical Path Method network (CPM) activity code: agency-specific code; allow up to 10 alphanumeric characters.
- d Laborer name: last, first & middle initial.
- e Labor classification: agency-specific code; allow up to 10 alphanumeric characters.
- f Trainee status: Boolean value.
- g Hours: numeric value (0 to 24; up to 2 places behind the decimal point).
- h Hours type flag: flag value to indicate regular vs. overtime hours.
- i Force account flag: Boolean value (CCO observations only).

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Equipment Observation Data.--Collect multiple equipment observations per observation data set:

- a Contract item or CCO: sequential number; allow up to 6 digits.
- b Contractor ID: agency-specific code; allow up to 10 alphanumeric characters.
- c CPM activity code: agency-specific code; allow up to 10 alphanumeric characters.
- d Equipment ID: contractor-specific code; allow up to 10 alphanumeric characters.
- e Equipment description ("new" equipment only): general text field; allow up to 60 characters.
- f Rental status: Boolean value.
- g Hours: numeric value (0 to 24; up to 2 places behind the decimal point).
- h Hours type flag: flag value to indicate regular vs. overtime vs. idle hours.
- i Force account flag: Boolean value (CCO observations only).

Pay Items Observation Data.--Collect multiple pay items observations per observation data set:

- a Contract item or CCO: sequential number; allow up to 6 digits.
- b Contractor ID: agency-specific code; allow up to 10 alphanumeric characters.
- c CPM activity code: agency-specific code; allow up to 10 alphanumeric characters.
- d Location/Station: general text field; allow up to 60 characters.
- e Load ticket ID: Contractor-specific value; allow up to 15 alphanumeric characters.
- f Quantity: numeric value; floating point (11,2) specification.
- g Lot number: Contractor-specific value; allow up to 15 alphanumeric characters.
- h Lab release number: Contractor-specific value; allow up to 15 alphanumeric characters.
- i Force account flag: Boolean value (CCO observations only).
- j Units type (force account observations only): agency-specific code; allow up to 10 alphanumeric characters.
- k Material type (force account observations only): general text field; allow up to 60 characters.

Remarks Data.--Collect multiple remarks per observation data set:

- a Contract item or CCO (optional): sequential number; allow up to 6 digits.
- b Contractor ID (optional): agency-specific code; allow up to 10 alphanumeric characters.
- c CPM activity code: agency-specific code; allow up to 10 alphanumeric characters.
- d Remark type: agency-specific code; allow up to 10 alphanumeric characters.
- e Remark text: general text field; allow up to 1,950 characters.
- f Force account flag: Boolean value (CCO observations only).

2. Provide meaningful display of coded information.

- a Display contract descriptions in addition to contract numbers.
- b Display item/CCO descriptions in addition to item/CCO numbers.
- c Display CPM activity descriptions in addition to CPM activity codes.
- d Display Contractor names in addition to Contractor IDs.
- e Display equipment descriptions in addition to equipment IDs.
- f Display labor classification descriptions in addition to labor classification codes.
- g Display material types and units of measure based on contract item number.
- h Display remark type descriptions in addition to remark type code.
- i Display weather condition descriptions in addition to weather condition codes.

3. Facilitate entry of inspection data.

In general, methods of data entry shall require the minimum number of actions from the user as is practical.

- a Provide pick lists from the central database for entry of the following fields:
 - 1 Contract numbers.
 - 2 Contract item numbers.
 - 3 Contractor Ids.
 - 4 CPM activity codes.
 - 5 Laborers.
 - 6 Labor classifications.
 - 7 Equipment.
 - 8 Remark types.
 - 9 Weather conditions (am and p.m.).
 - 10 Also provide alphabetical tabs for navigating the list of laborer.

- b Provide option of handwriting or typewriter keypad entry for the following fields:
 - 1 Inspector ID, password, name, and title.
 - 2 Load ticket number.
 - 3 Lot number.
 - 4 Lab release number.
 - 5 Materials location.
 - 6 Remark text.
 - 7 Laborer name for “new” people.
 - 8 Equipment ID and description for “new” equipment.

- c Provide option of handwriting or numeric keypad entry for the following fields:
 - 1 Contract item number.
 - 2 CPM activity codes.
 - 3 Materials quantity.
 - 4 Temperatures (high and low).
 - 5 Humidity (high and low).

- d Provide “clock” controls for entry of the following fields:
 - 1 Inspector shift hours.
 - 2 Jobsite shift hours.
 - 3 Hours (labor & equipment observations).

- e Provide calendar keypad entry for the following fields:
 - 1 Observation date.

- f Provide checkboxes for entry of the following Boolean fields:
 - 1 Trainee status.
 - 2 Rental status.
 - 3 Force account status.

- g Provide radio buttons for entry of the following fields:
 - 1 Hours type flag (regular, overtime, idle).

- h Provide popup menu for entry of the following fields:
 - 1 Level of inspection.

- i Copy into labor & equipment observations relevant ratebook codes and values from the central database.
- j Provide option to use handwriting or typewriter keypad to enter equipment ID for equipment observations and look up the corresponding piece of equipment, as an alternative to choosing the piece of equipment from a list.

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- k Provide option to change the labor classification for a labor observation even if the laborer name and classification have been selected from a list (to allow observations of laborers working out of their normal classes).
- 4. Store observation data sets.
 - a Store all entered data on the mobile platform for up to 100 observations (any combination of types) per contract observation data set.
 - b Store data for up to 30 observation data sets on the mobile platform.
 - c Store or backup data on non-volatile memory to guard against data loss.
- 5. Support review and modification of observation data sets.
 - a Allow user to select observation data sets from a list by identifying:
 - 1 Engineer ID.
 - 2 Observation date.
 - 3 Contract number.
 - b Once a data set is selected, display all observation entries in an overview list. Allow list to be sorted by observation type, contract item, or Contractor. Also allow list to be restricted by observation type (labor, equipment, materials, or remarks) so that additional data can be displayed for the observations (e.g., labor name, hours & hours type for labor entries).
 - c Provide option to duplicate observation entries from the list, optionally setting item number & hours fields to new values.
 - d Allow list entries to be selected and edited.
 - e Allow user to update weather condition and shift hour data.
 - f Allow user to duplicate entire observation data sets to a new date selected by the user.
 - g Allow user to delete observation data sets (after confirmation).
- 6. Communicate with database server to upload diaries and download control tables.
 - a Allow user to mark diaries as “done” and collect a signature image at that time. After the diary has been signed, prohibit any other modifications to the diary. If diary is marked “undone” then allow modifications but throw away signature, so that a new signature is always required at whatever point the diary is marked “done” (i.e., ready for transmission).
 - b Connect to communications server via direct serial connection, providing database user ID and password.
 - c Send observation data.
 - 1 Select for transmission all observation data sets marked “done” that have not yet been transmitted.
 - 2 Output a serial stream containing the observation data sets to be transmitted.
 - 3 Display status during transmission and provide confirmation that data was sent to the server.
 - 4 Set a flag in transmitted data sets to indicate that they have been transmitted.
 - 5 Be capable of handling unexpected interruptions in the communication link.
 - d Receive control table data.
 - 1 Automatically request all necessary control table downloads, providing both user ID and date of last download.
 - 2 Accept a serial stream containing control table updates.
 - 3 Display status during transmission and provide confirmation that data was received from the server.
 - 4 Set the date of last update for received control tables.
 - 5 Be capable of handling unexpected interruptions in the communication link.

6. Provide additional productivity support.
 - a Display a list of names with addresses, phone numbers, radio call numbers and vehicle IDs. List entries must be transparently downloaded from a central database along with other control table data.
 - b Provide word processor application that can be used with external keyboard.
 - c Provide spreadsheet application.
 - e Provide a calendar and appointment application.
 - f Provide a programmable scientific calculator option.

8. Provide adequate hardware functionality for hand-held computer.
 - a Allow data (other than signature image) to be entered with choice of either pen, on-screen-pad keyboard, or external keyboard.
 - b Weigh less than 2 pounds.
 - c Battery to have a life of at least 4 continuous hours between charging.
 - d Provide "instant on" capability.
 - e Operate within a temperature range of 32 to 104 degrees Fahrenheit (similar to most electronic calculators).
 - f Backlit screen

DATABASE COMMUNICATION SUBSYSTEM.--

1. Connect to mobile platform and database server:
 - a Connect to mobile platform via direct serial connection.
 - b Accept database user ID and password from mobile platform.
 - c Use the user ID and password to connect to Oracle database for read/write access, either locally or across a local area network.

2. Upload observation data.
 - a Accept upload requests and data from the mobile device.
 - b Drive data recognition and database write functions from an editable configuration file.
 - c Write observation data to an Oracle database.
 - d Be capable of handling unexpected interruptions in the communication link.

3. Download control data.
 - a Accept download requests from the mobile device.
 - b Drive data selection and database read functions from an editable configuration file and information (user and date of last download) supplied by the mobile device, to limit downloads to only the required data.
 - c Read information from an Oracle database and output it to the mobile device.
 - d Be capable of handling unexpected interruptions in the communication link.

4. Output audit and debugging data.
 - a Provide an option to create archive files for data uploads.
 - b Provide an option to create trace file output for data uploads.

5. Provide status/feedback on server operations.
 - a Display status and information regarding in-progress data transmissions.
 - b Provide optional trace window to display low-level actions of the server application in readable form.

6. Allow administrator to control the server application.
 - a Allow administrator to start/stop communication activity.
 - b Allow administrator to select connection port and configuration file.
 - c Allow administrator to select archive and trace options.

Data Access Subsystem

1. Connect desktop workstation to database server and validate user name and password for authority to access data.
2. View observation data:
 - a Retrieve observation data sets based on date and (optional) inspector, contract item number, CCO number, or CPM activity code (in any combination).
 - b Display observation data sets on-line in a screen version of Daily Diaries.
 - c Print observation data sets in a paper version of Daily Diaries. Diaries shall include the following information:
 - 1 First page header: Caltrans logo, contract number & description, date, workday, jobsite and inspector shift hours, weather am/p.m., temperature hi/lo, humidity hi and lo, inspector name and signature, page number.
 - 2 Subsequent page header: contract number & description, date, workday, inspector name, page number.
 - 3 Report body: summary of items of work performed, list of laborers, list of equipment, list of pay items, list of general remarks.
 - 4 Report footer: "end of report" indicator.
 - d Print a special "CCO diary" to show only observations for a specified CCO.
 - e Print a special "activity diary" to show only observations for a specified CPM activity.
 - f Compute and display/print the California Department of Transportation (Caltrans) construction workday for each diary.
3. Edit observation data:
 - a Retrieve observation data sets based on inspector and approval status.
 - b Display observation data sets on-line in a screen version of Daily Diaries.
 - c Allow observation data sets to be created, duplicated, and edited on-line, providing substantially the same functionality as provided by the mobile computer but adapted for desktop environment.
 - d Allow observation data sets to be imported from plain text files.
 - e Print observation data sets in a paper version of Daily Diaries.
 - f Print "CCO diary" to show only observations for a specified CCO.
 - g Print "activity diary" to show only observations for a specified CPM activity.
 - h Compute and display/print the Caltrans construction workday for each diary.
4. Approve observation data:
 - a Retrieve observation data sets based on inspector, supervisor, and approval status.
 - b Display observation data sets on-line in a screen version of Daily Diaries.
 - c Allow observation data sets to be approved or rejected on-line.
 - d Print observation data sets in a paper version of Daily Diaries.
 - e Print "CCO diary" to show only observations for a specified CCO.
 - f Print "activity diary" to show only observations for a specified CPM activity.
 - g Compute and display/print the Caltrans construction workday for each diary.

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5. Report observation data.
 - a Display/print an inspector work summary report by date, supervisor, inspector, contract.
 - b Display/print a labor compliance report by date, Contractor, employee, contract.
 - c Display/print an item detail report for labor hours by date, Contractor, contract, item/CCO/activity.
 - d Display/print an item detail report for equipment hours by date, Contractor, equipment ID, contract, item/CCO/activity.
 - e Display/print an item detail report for pay items by date, Contractor, contract, item/CCO/activity.
 - f Display/print an item detail report for remarks by date, remark type, contract, item/CCO/activity.
 - g Display/print an extra work report for labor hours by date, Contractor, contract, CCO.
 - h Display/print an extra work report for equipment hours by date, Contractor, equipment ID, contract, CCO.
 - i Display/print an extra work report for pay items by date, Contractor, contract, CCO.
 - j Display/print a pay items summary report by date and contract.

6. Prepare source sheets for use in pay estimates.
 - a Allow source sheets to be selected by contract, item and month.
 - b Provide storage for estimate data on a per-item basis:
 - 1 Original estimate quantity, changes due to CCO, and current estimate quantity.
 - 2 Quantity previously paid, quantity paid this month, total paid to date.
 - c Provide a list of which items have had activity for the current month.
 - d Automatically retrieve all pay item observations for the given item and the given month and calculate the total.
 - e Allow monthly total to be adjusted and reason for adjustment to be recorded.
 - f Print the resulting source sheets.

7. Allow maintenance of control table data in the Oracle database:
 - a Provide the ability to add, modify or delete entries in the database control tables:
 - 1 Users (inspectors).
 - 2 Weather conditions.
 - 3 Labor classifications
 - 4 Remark types.
 - 5 Employee Titles.
 - 6 Name/phone list.
 - 7 Contractors.
 - 8 Laborers.
 - 9 Equipment.
 - 10 Contracts.
 - 11 Contract items.
 - 12 CCOs.
 - 13 CPM activity codes.
 - 14 Inspector assignments to contracts.
 - 15 Contractor assignments to contract items.
 - b Provide the ability to import lists of laborers & equipment from contractors into the database.
 - c Maintain integrity of database data and constraints during edit and import processes.

HARDWARE REQUIREMENTS.--The Contractor shall furnish all hardware required for the electronic mobile daily diary computer system, including PDAs, desktop systems, servers, printers, and miscellaneous hardware. The minimum requirements for the various classes of hardware are as follows:

- 1 PDA: Apple Newton 2100 MessagePad or 100% compatible with 8MB RAM, 8MB ROM, 2MB external RAM card, charging station, carrying case, and Newton OS 2.0.

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- 2 Desktop: Complete computer system, including keyboard, mouse and monitor, using a 266 MHz Intel Pentium II processor or equivalent with minimum of sixty-four (64) megabytes of random access memory (RAM), three-gigabyte minimum hard disk drive, 1.44 megabyte 3 1/2 inch floppy disk drive, 16x speed minimum CD-ROM drive, 33.6/14.4 modem, 17-inch minimum monitor capable of at least 1,024 x 768 pixels, and Windows NT user (client) license.
- 3 Printer: HP LaserJet 5-series or 100% compatible.
- 4 Network: Ethernet network with twisted-pair wiring and passive hub.

The Contractor shall supply hardware for the system in the following quantities:

- 1 35 – PDA and accessories as described above.
- 2 04– desktop workstations as described above.
- 3 01– printers as described above.
- 4 as need it – misc. network hardware and cables as described above.
- 5 10 – PDA keyboards.
- 6 35– Oracle Workgroup Server licenses.
- 7 100 - WriteRight screen enhancers
- 8 70 - Replacement styluses for PDAs

SUPPORT REQUIREMENTS.--The Contractor shall furnish all support required for the electronic mobile daily diary computer system. The minimum requirements for support are as follows:

- 1 Installation: initial on-site installation and verification of hardware, software and networks.
- 2 Training: initial on-site training for one half day for up to (35) Caltrans inspectors and database/system administrators.
- 3 Telephone and e-mail support: the Caltrans system administrator may submit operational questions by telephone during normal business hours or by electronic mail at any time. Emergencies will receive immediate attention, and other questions will be answered within one business day.
- 4 Software updates: occasional maintenance updates to the application software, as available.
- 5 On-site visits: scheduled visits to the installation site to check system operation, provide “refresher” or advanced training as applicable, install software updates, as agreed with the Engineer.

The Contractor shall furnish support required for the Electronic Mobile Daily Diary Computer System for a period of 24 months following award of contract.

PAYMENT.--Mobile Daily Diary Computer System will be paid at a lump sum price.

The contract lump sum price paid for the electronic mobile daily diary computer system shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in supplying the mobile daily diary computer system, complete and in place, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment for providing and implementing this mobile daily diary computer system will be made on a lump sum basis, in 4 milestones as follows:

Milestone 1: This milestone will be satisfied upon delivery and installation of hardware and database software as described under "Hardware Requirements", above. Payment for milestone 1 will equal 45% of total item lump sum cost.

Milestone 2: This milestone will be satisfied upon acceptance of the system by the Engineer as functionally complete per these specifications. Payment for milestone 2 will equal 25% of total item lump sum cost.

Milestone 3: This milestone will be satisfied upon completion of initial training for Department personnel. Training shall be held at a time and location approved by the Engineer. Payment for milestone 3 will equal 15% of total item lump sum cost.

Milestone 4: This milestone will be satisfied upon completion of the third of three feedback sessions between the Electronic Mobile Daily Diary Computer System vendor and Department engineers. Payment for milestone 4 will equal 15% of total item lump sum cost.

REPLACED PER ADDENDUM NO. 1 DATED DECEMBER 23, 1997

10-1.03 ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY

Attention is directed to Sections 5-1.10, "Equipment and Plants," and 7-1.01A(3), "Payroll Records," of the Standard Specifications, and these special provisions.

The Contractor shall submit to the Engineer a list of each piece of equipment and its identifying number, type, make, model and rate code in accordance with the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rate" which is in effect on the date upon the work is performed, and the names, labor rates and work classifications for all field personnel employed by the Contractor and all subcontractors in connection with the public work, together with such additional information as is identified below. This information shall be updated and submitted to the Engineer weekly through the life of the project.

This personnel information will only be used for this mobile daily diary computer system and it will not relieve the Contractor and subcontractors from all the payroll records requirements as required by Section 7-1.01A(3), "Payroll Records," of the Standard Specifications.

The Contractor shall provide the personnel and equipment information not later than 11 days after the contract award for its own personnel and equipment, and not later than 5 days before start of work by any subcontractor for the labor and equipment data of that subcontractor.

The minimum data to be furnished shall comply with the following specifications:

Data Content Requirements.--

1. The Contractor shall provide the following basic information for itself and for each subcontractor that will be used on the contract:

Company Name.	Alphanumeric; up to 30 characters.
Company type (prime or sub)	Alphanumeric; up to 10 characters.
Address (line 1).	Alphanumeric; up to 30 characters.
Address (line 2).	Alphanumeric; up to 30 characters.
Address (city).	Alphanumeric; up to 30 chars.
Address (2-letter state code).	Alphanumeric; up to 2 characters.
Address (zip code)	Alphanumeric; up to 14 characters.
Contact name.	Alphanumeric; up to 30 characters
Telephone number (with area code).	Alphanumeric; up to 20 characters.
Company code: short company name.	Alphanumeric; up to 10 characters.
Type of work (Department-supplied codes)	Alphanumeric; up to 30 characters
DBE status (Department-supplied codes)	Alphanumeric; up to 20 characters.
Ethnicity for DBE status (Department-supplied codes).	Alphanumeric; up to 20 characters.
List of laborers to be used on this contract (detail specified below).	
List of equipment to be used on this contract (detail specified below).	

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For example, one such set of information for a company might be:

XYZ
1240 9TH STREET
SUITE 600
OAKLAND
CA
94612
JOHN SMITH
(510) 834-9999
XYZ
MBE
BLACK

2. The Contractor shall provide the following information for each laborer who will be used on the contract:

Company code (as defined above).	Alphanumeric; up to 10 characters.
Last name.	Alphanumeric; up to 20 characters.
First name.	Alphanumeric; up to 15 characters.
Middle initial.	Alphanumeric; up to 1 characters.
Labor classification (Department-provided codes).	Alphanumeric; up to 10 characters.
Hourly rate.	Alphanumeric; up to (6,2)
Trainee status (Y/N).	Alphanumeric; up to 1 characters
Ethnicity (Department-provided codes).	Alphanumeric; up to 20 characters.
Gender.	Alphanumeric; up to 1 characters.

For example, one such set of information might be:

XYZ
GONZALEZ
HECTOR
V
OPR
22.75
N
HISPANIC
M

3. The Contractor shall provide the following information for each piece of equipment that will be used on the contract:

Company code (as defined above).	Alphanumeric; up to 10 characters.
Company's equipment ID number.	Alphanumeric; up to 10 characters.
Company's equipment description.	Alphanumeric; up to 60 characters.
Equipment type (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment make (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment model (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment rate code (from Department ratebook).	Alphanumeric; up to 10 characters.
Hourly rate.	Alphanumeric; up to (6,2)
Rental flag.	Alphanumeric; up to 1 character.

For example, one such set of information might be:

XYZ
B043
CAT TRACTOR D-6C
TRACC
CAT
D-6C
3645
28.08
N

Data Delivery Requirements.--

1. All data described in "Data Requirements" of this section shall be delivered to the Department electronically, on 3 1/4" floppy disks compatible with the Microsoft Windows operating system. The Contractor shall provide a weekly disk and hard copy of the required correct updated personnel and equipment information for the Contractor and all the subcontractors and verified correct by the Engineer.
2. Data of each type of described in the previous section (contractor, labor, and equipment information) will be delivered separately, each type in one or more files on floppy disk. Any given file may contain information from one contractor or from multiple contractors, but only one type of data (contractor, labor, or equipment information).
3. The file format for all files delivered to Caltrans shall be standard comma-delimited, plain text files. . This type of file (often called "CSV") is the most standard type for interchange of formatted data; it can be created and read by all desktop spreadsheet and desktop database applications. Characteristics of this type of file are:
 - a All data is in the form of plain ASCII characters.
 - b Each row of data (company, person, equipment) is delimited by a carriage return character.
 - c Within rows, each column (field) of data is delimited by a comma character.

4. The files shall have the following columns (i.e., each row shall have the following fields):
 - a Contractor info: 11 columns (fields) as specified in "Data Requirements #1", above.
 - b Labor info: 9 columns (fields) as specified in "Data Requirements #2", above.
 - c Equipment info: 8 columns (fields) as specified in "Data Requirements #3", above.

For each type of file, columns (fields) must be in the order specified under "Data Requirements", above. All columns (fields) described under "Data Requirements" must be present for all rows, even if some column (field) values are empty. The first row of each file may contain column headers (in plain text) rather than data, if desired.

5. Column (field) contents must conform to the data type and length requirements described in the "Data Requirement" section, above. In addition, column (field) data must conform to the following restrictions:
 - a All data shall be uppercase.
 - b Company type shall be either "PRIME" or "SUB".
 - c Labor classification codes must conform to a list of standard codes that will be supplied by Department.
 - d Contractor type of work codes and DBE status codes must conform to a list of standard codes that will be supplied by Department.
 - e Ethnicity codes must conform to standard codes that will be supplied by Department.
 - f Data in the "trainee status" column must be either "Y" or "N".
 - g Data in the "gender" column must be either "M" or "F".
 - h Data in the "rental equipment" column must be either "Y" or "N".
 - i Equipment owner's description may not be omitted. (The description, together with the equipment number, is how the equipment will be identified in the field.)
 - j Equipment type, make, model, and ratebook code shall conform to the Department of Transportation Publication entitled "Labor Surcharge and Equipment Rental Rate", which is in effect on the date upon the work is performed. If the equipment in question does not have an entry in the book then alternate, descriptive entries may be made in these fields.
6. The name of each file must indicate its contents, e.g., "XYZlab.txt" for laborers from XYZ Company, Inc. Each floppy disk supplied to Caltrans must be accompanied by a printed list of the files it contains with a brief description of the contents of each file.

PAYMENT.-- Payment for providing electronic mobile daily diary computer system data delivery will be made on a lump sum basis .The lump sum bid price for electronic mobile daily diary computer system data delivery will be made according to the following schedule:

The Contractor will receive not more than 3 per cent per month of the total bid price for electronic mobile daily diary computer system data delivery .

After the completion of the work, 100 per cent payment will be made for electronic mobile daily diary computer system data delivery less the permanent deduction, if any, for failure to deliver complete weekly electronic mobile daily diary computer system data in each month.

The contract lump sum price paid for electronic mobile daily diary computer system data delivery shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in electronic mobile daily diary computer system data delivery as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

In the event the Contractor fails to deliver complete weekly electronic mobile daily diary computer system data in each month , the Department will retain 3 per cent of the total bid price for electronic mobile daily diary computer system data delivery until the data is delivered.

10-1.05 WATER POLLUTION CONTROL

Water pollution control work shall conform to the requirements in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these special provisions.

This project shall conform to the requirements of Permit No.CAS029998 issued by the San Francisco Bay Regional (Region 2) Water Quality Control Board. This permit and amendments thereof, hereafter referred to as the "Permit," regulates storm water discharges associated with construction activities.

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbooks, dated April 1997, and addenda thereto issued up to and including the date of advertisement of the project, hereafter referred to as the "Handbook". Copies of the Handbook may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520. In addition, a Conceptual Storm Water Pollution Prevention Plan, hereafter referred to as the "CSWPPP," has been prepared for this project by the Department. The CSWPPP shall be used as a reference for determining and preparing the minimum work required under the Permit and this Special Provision.

Copies of the Handbook, CSWPPP, and Permit are available for review at 111 Grand Avenue, Oakland, California 94601. Please call the Toll Bridge Program Duty Senior, telephone number (510) 286-5549, to reserve a copy of the documents at least 24 hours in advance.

The Contractor shall become fully informed of and comply with the applicable provisions of the Handbook, Permit and Federal, State and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall maintain a copy of the Permit at the project site and shall make the Permit available during construction activities.

Unless arrangements for disturbance of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility to the Contractor or property owner whatsoever with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.

The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section "Water Pollution Control", including but not limited to, compliance with the applicable provisions of the Handbook, Permit and Federal, State and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to any remedy authorized by law, so much of the money due the Contractor under the contract that shall be considered necessary by the Department may be retained by the State of California until disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

1. The Department will give the Contractor 30 days notice of its intention to retain funds from any partial payment which may become due to the Contractor prior to acceptance of the contract. Retention of funds from any payment made after acceptance of the contract may be made without prior notice to the Contractor.
2. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.
3. If the Department has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the Department shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the requirements of this section "Water Pollution Control" shall not relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

The Contractor shall, at reasonable times, allow authorized agents of the California Regional Water Quality Control Board, State Water Resources Control Board, U. S. Environmental Protection Agency and local storm water management agency, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the construction site and the Contractor's facilities pertinent to the work;
2. Have access to and copy any records that must be kept as specified in the Permit;
3. Inspect the construction site and related soil stabilization practices and sediment control measures; and
4. Sample or monitor for the purpose of ensuring compliance with the Permit.

The Contractor shall notify the Engineer immediately upon request from regulatory agencies to enter, inspect, sample, monitor or otherwise access the project site or the Contractor's records.

STORM WATER POLLUTION PREVENTION PLAN PREPARATION, APPROVAL AND UPDATES.—

As part of the water pollution control work, a Storm Water Pollution Prevention Plan, hereafter referred to as the "SWPPP," is required for this contract. The SWPPP shall conform to the requirements in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the requirements in the Handbook, the requirements of the Permit and these special provisions. Upon the Engineer's approval of the SWPPP, the SWPPP shall be deemed to fulfill the requirements of Section 7-1.01G, "Water Pollution," of the Standard Specifications for development and submittal of a Water Pollution Control Program.

No work having potential to cause water pollution, as determined by the Engineer, shall be performed until the SWPPP has been approved by the Engineer.

Within 20 days after the approval of the contract, the Contractor shall submit 3 copies of the SWPPP to the Engineer. The Contractor shall allow 15 days for the Engineer to review the SWPPP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the SWPPP within 10 days of receipt of the Engineer's comments and shall allow 10 days for the Engineer to review the revisions. Upon the Engineer's approval of the SWPPP, 3 additional copies of the SWPPP, incorporating the required changes, shall be submitted to the Engineer. In order to allow construction activities to proceed, the Engineer may conditionally approve the SWPPP while minor revisions are being completed.

The objectives of the SWPPP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement and maintain water pollution control measures, hereafter referred to as control measures, to reduce to the extent feasible pollutants in storm water discharges from the construction site both during and after construction is completed under this contract.

The SWPPP shall incorporate control measures in the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Sediment tracking control practices;
4. Wind erosion control practices; and
5. Non-storm water management and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of control measures are contained in the Handbook.

The Contractor shall consider the objectives and minimum requirements presented in the Handbook for each of the above categories. When minimum requirements are listed for any category, the Contractor shall incorporate into the SWPPP and implement on the project, one or more of the listed minimum controls required in order to meet the pollution control objectives for the category. In addition, the Contractor shall consider other control measures presented in the Handbook and shall incorporate into the SWPPP and implement on the project the control measures necessary to meet the objectives of the SWPPP. The Contractor shall document the selection process in accordance with the procedure specified in the Handbook.

The Contractor shall consider the objectives and minimum requirements presented in the Handbook for each of the above categories. The special minimum requirements listed below supersede the minimum requirements listed in the Handbook for the same category. When minimum requirements are listed for any category, the Contractor shall incorporate into the SWPPP, and implement on the project, one or more of the listed minimum controls required in order to meet the pollution control objectives for the category. In addition, the Contractor shall consider other control measures presented in the Handbook and shall incorporate into the SWPPP and implement on the project the control measures necessary to meet the objectives of the SWPPP. The Contractor shall document the selection process in accordance with the procedure specified in the Handbook. The following special minimum requirements are established:

Category:	Minimum Requirements:
Non-Storm Water and Waste Management Controls	CD7(2) Dewatering, CD9(2) Structure Construction & Painting. CD10(2) Material Delivery and Storage, CD11(2) Material Use, CD12(2) Spill Prevention and Control, CD13(2) Solid Waste Management, CD16(2) Concrete Waste Management. CD17(2) Sanitary and Septic Waste Management. CD18(2) Vehicle and Equipment Cleaning, CD19(2) Vehicle and Equipment Fueling, CD20(2) Vehicle and Equipment Maintenance, CD22(2) Scheduling CD44(2) Illicit Discharge/Illegal Dumping Reporting
Erosion & Sediment Source Controls	CD25(25(2) Mulching CD26B(2) Geotextiles, Mats/Plastic Covers & Erosion Control Blankets
Wind Erosion Controls	CD26B(2) Geotextiles, Mats/Plastic Covers & Erosion Control Blankets
Sediment Treatment Controls	CD36(2) Silt Fences. CD40(2) Storm Drain Inlet Protection CD43(2) Fiber Rolls

The SWPPP shall include, but not be limited to, the following items as described in the Handbook and Permit:

1. Source Identification;
2. Erosion and Sediment Controls;
3. Non-Storm Water Management;
4. Waste Management and Disposal;
5. Maintenance, Inspection and Repair;
6. Training;
7. List of Contractors and Subcontractors;
8. Post-Construction Storm Water Management;
9. Preparer;
10. Copy of the local permit;;
11. BMP Consideration Checklist;
12. SWPPP Checklist;
13. Schedule of Values; and
14. Water Pollution Control Drawings.

The Contractor shall amend the SWPPP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Engineer. The SWPPP shall also be amended if it is in violation of any condition of the Permit, or has not effectively achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially approved SWPPP, which are required on the project to control water pollution effectively. Amendments to the SWPPP shall be submitted for review and approval by the Engineer in the same manner specified for the initially approved SWPPP. The time to be provided for the Engineer's review and approval of an amendment shall be 10 working days prior to beginning any of the operations associated with the amendment. Operations will not be permitted until the amendment has been approved by the Engineer. Approved amendments shall be dated and logged in the SWPPP. Upon approval of the amendment, the Contractor shall implement the additional control measures or revised operations.

The Contractor shall keep a copy of the SWPPP and approved amendments at the project site. The SWPPP shall be made available upon request of a representative of the Regional Water Quality Control Board, State Water Resources Control Board, U.S. Environmental Protection Agency or local storm water management agency. Requests by the public shall be directed to the Engineer.

By June 15 of each year, the Contractor shall submit an annual certification to the Engineer stating compliance with the requirements governing the Permit. If the project is in non-compliance at any time, the Contractor shall make a written report to the Engineer within 48 hours of identification of non-compliance.

SCHEDULE OF VALUES.—The Contractor shall submit with the SWPPP, for approval by the Engineer, a schedule of values detailing the cost breakdown of the contract lump sum item for water pollution control. The schedule of values shall reflect the items of work, quantities and costs for control measures shown in the SWPPP, except for critical temporary controls and permanent control measures which are shown on the project plans and for which there is a contract item of work. Adjustments in the items of work and quantities listed in the schedule of values shall be made when required to address approved amendments to the SWPPP.

The sum of the amounts for the units of work listed in the schedule of values shall be equal to the contract lump sum price for water pollution control.

If approved in writing by the Engineer, the schedule of values will be used to determine progress payments for water pollution control during the progress of the work, and as the basis for calculating any adjustment in compensation for the contract item for water pollution control due to changes in the work ordered by the Engineer.

SWPPP IMPLEMENTATION.—Upon approval of the SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the control measures included in the SWPPP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Engineer or specified in these special provisions, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal and disposal of control measures are specified in the Handbook and these special provisions.

Soil stabilization practices and sediment control measures, including minimum requirements, shall be provided throughout the winter season, defined as between September 15 and May 1.

Implementation of soil stabilization practices and sediment control measures for soil-disturbed areas of the project site shall be completed, except as provided for below, no later than 20 days prior to the beginning of the winter season or upon start of applicable construction activities for projects which begin either during or within 20 days of the winter season.

Throughout the winter season, the active, soil-disturbed area of the project site shall be no more than 2.5 acres. The Engineer may approve, on a case-by-case basis, expansions of the active, soil-disturbed area limit. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control measures to protect soil-disturbed areas of the project site before the onset of precipitation. The Contractor shall maintain a quantity of soil stabilization and sediment control materials on site equal to 125 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site and shall maintain a detailed plan for the mobilization of sufficient labor and equipment to fully deploy control measures required to protect unprotected, soil-disturbed areas on the project site prior to the onset of precipitation. The Contractor shall include a current inventory of control measure materials and the detailed mobilization plan as part of the SWPPP.

Throughout the winter season, soil-disturbed areas of the project site shall be considered to be nonactive whenever soil disturbing activities are expected to be discontinued for a period of 5 or more days and the areas are fully protected. Areas that will become nonactive either during the winter season or within 20 days thereof shall be fully protected with soil stabilization practices and sediment control measures within 10 days of the discontinuance of soil disturbing activities or prior to the onset of precipitation, whichever is first to occur.

Throughout the winter season, active soil-disturbed areas of the project site shall be fully protected at the end of each day with soil stabilization practices and sediment control measures unless fair weather is predicted through the following work day. The weather forecast shall be monitored by the Contractor on a daily basis. The National Weather Service forecast shall be used, or an alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted prior to the end of the following work day, construction scheduling shall be modified, as required, and the Contractor shall deploy functioning control measures prior to the onset of the precipitation.

The Contractor shall implement, year-round and throughout the duration of the project, control measures included in the SWPPP for sediment tracking, wind erosion, non-storm water management and waste management and disposal.

The Engineer may order the suspension of construction operations which create water pollution if the Contractor fails to conform to the requirements of this section "Water Pollution Control" as determined by the Engineer.

MAINTENANCE.—To ensure the proper implementation and functioning of control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the SWPPP. The Contractor shall identify corrective actions and time frames to address any damaged measures or reinstate any measures that have been discontinued.

The construction site inspection checklist provided in the Handbook shall be used to ensure that the necessary measures are being properly implemented, and to ensure that the control measures are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Engineer.

During the winter season, inspections of the construction site shall be conducted by the Contractor to identify deficient measures, as follows:

1. Prior to a forecast storm;
2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24 hour intervals during extended precipitation events; and
4. Routinely, at a minimum of once every 2 weeks.

If the Contractor or the Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected by the Contractor immediately, or by a later date and time if requested by the Contractor and approved by the Engineer in writing, but not later than the onset of subsequent precipitation events. The correction of deficiencies shall be at no additional cost to the State.

PAYMENT.—The contract lump sum price paid for prepare storm water pollution prevention plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising and amending the SWPPP as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Attention is directed to Sections 9-1.06, "Partial Payments," and 9-1.07, "Payment After Acceptance," of the Standard Specifications. Payments for prepare storm water pollution prevention plan will be made as follows:

1. After the SWPPP has been approved by the Engineer, 75 percent of the contract item price for prepare storm water pollution prevention plan will be included in the monthly partial payment estimate; and
2. After acceptance of the contract pursuant to Section 7-1.17, "Acceptance of Contract," the remaining 25 percent of the contract item price for prepare storm water pollution prevention plan will be made in accordance with Section 9-1.07.

The contract lump sum price paid for water pollution control shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing, constructing, maintaining, removing and disposing of control measures, except those shown on the project plans and for which there is a contract item of work, and excluding developing, preparing, obtaining approval of, revising and amending the SWPPP, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Changes in control measures required by an approved amendment to the SWPPP, except changes to those control measures shown on the project plans and for which there is a contract item of work, will be considered extra work, in accordance with Section 4-1.03D of the Standard Specifications and the following:

If the control measure is listed in the approved SWPPP schedule of values, an adjustment in compensation for the contract item for water pollution control will be made by applying the increase or decrease in quantities to the approved schedule of values. No adjustment of compensation will be made to the unit price listed for any item in the schedule of values due to any increase or decrease in the quantities, regardless of the reason for the increase or decrease. The provisions in Section 4-1.03B, "Increased or Decreased Quantities," shall not apply to items listed in the schedule of values.

If the control measure is not listed in the approved SWPPP schedule of values, payment will be made by force account.

Those control measures which are shown on the project plans and for which there is a contract item of work will be measured and paid for as that item of work.

The Engineer will retain an amount equal to 25 percent of the estimated value of the contract work performed during estimate periods in which the Contractor fails to conform to the requirements of this section "Water Pollution Control" as determined by the Engineer.

Retentions for failure to conform to the requirements of this section "Water Pollution Control" shall be in addition to the other retentions provided for in the contract. The amounts retained for failure of the Contractor to conform to the requirements of this section will be released for payment on the next monthly estimate for partial payment following the date that an approved SWPPP has been implemented and maintained, and water pollution is adequately controlled, as determined by the Engineer.

10-1.05A NON-STORM WATER DISCHARGES.

Non-storm water discharges shall conform to the requirements in Section 7-1.01G, "Water Pollution" of the Standard Specifications and these special provisions

Conformance with the requirements of this section shall in no way relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

Pile & Cofferdam Dewater.-- Suspended solids shall be removed during the dewatering operation for piles and cofferdams, as specified in these special provisions. Attention is directed to "Earthwork" and "Piling" of these special provisions.

Suspended solids shall be removed to the extent that visible, floating products are not apparent within the discharge. Also, the discharge shall be of a purity such that turbidity and apparent color beyond present natural background levels are not apparent within the receiving water body. The turbidity, measured in Nephelometric Turbidity Units (NTU), of the discharge shall not be greater than a 10 percent increase of the background turbidity. The point of effluent discharge shall not cause bottom sediments, aquatic vegetation, or surface soils to become dislodged or disturbed.

The Contractor shall graphically depict the dewatering process within the Storm Water Pollution Prevention Plan (SWPPP), as specified in "water Pollution Control" of these special provisions. The graphic shall show both a sectional and plan view that details the removal techniques for suspended solids. The graphic shall define the flow path and placement of pipes, hoses, pumps, and other equipment used to convey the discharge. In addition, the contractor shall provide a sketch that depicts the general position of the apparatus relative to the pile(s) or cofferdam(s) undergoing dewatering and the point of effluent discharge.

The Contractor shall describe the dewatering apparatus within the appropriate sections of the SWPPP. The description shall include, but not be limited to, an estimate of the discharge volume, flow rate, and frequency; location of discharge; and the inspection and monitoring procedures related to the discharge.

The Contractor shall conduct a daily inspection of the dewatering equipment, when in use, to ensure that all components are functional and routinely maintained to prevent leakage prior to removal of suspended solids. Any component of the apparatus that is found to be damaged or to affect the performance of the apparatus shall be either immediately repaired or replaced.

The Contractor shall visually monitor both the discharge and the receiving water body. The observations made during monitoring shall include the color, size of affected area, presence of suspended material, presence of water fowl or aquatic wildlife, wind direction and velocity, tidal condition, atmospheric condition, time, and date. In addition, the Contractor shall supplement the observations with photographs. The contractor shall conduct monitoring, at a minimum, one hour prior to discharge, during the first ten minutes of initiating discharge, every four hours during discharge, and upon cessation of discharge. The observations shall be recorded daily in a tabular format known as the monitoring report provided within the Conceptual Storm Water Pollution Prevention Plan, as described within "water Pollution Control" of these special provisions. The monitoring report, including photographs, shall be provided weekly to the Engineer, or as directed by the Engineer.

Observations, which indicate that the discharge is of a visible purity such that turbidity is greater than 10 percent above the natural background turbidity, measured in NTU, or that the apparent color is beyond the natural background level shall be immediately reported to the Engineer. The discharge activity shall immediately cease, and corrective actions shall be undertaken to repair, modify, or replace the equipment. The commencement of discharge activities shall be allowed upon approval by the Engineer.

Stockpile Dewater.-- The Contractor shall prevent the flow of water, including ground water, surface runoff and tidal flow from entering any temporary stockpiles on land.

The Contractor shall depict and describe within the Storm Water Pollution Prevention Plan (SWPPP), or an amendment to the SWPPP, as specified in "water Pollution Control" of these special provisions, the methods and measures that will be used to dewater the temporary stockpiles, to seal the sides and bottom of the temporary stockpiles, and to prevent the flow of water into the stockpiles. The time to be provided for the Engineer's review and approval of any amendment to the SWPP shall be 10 working days prior to beginning temporary stockpile operations. Operations producing water will not be permitted until the plan has been approved by the Engineer.

All water removal from temporary stockpiles shall be handled in accordance with National Pollutant Discharge Elimination System (NPDES) Permit CAS029998, issued by the San Francisco Bay Regional Water Quality Control Board. Copies of the permit and its amendments will be available for inspection and purchase at the Department of Transportation, Duty Senior's Desk, 111 Grand Avenue, Oakland, California, (510) 286-5209.

The Contractor is responsible for all work, records, reports, and costs involved in handling the water in accordance with the NPDES permit. The Contractor shall supply all analytical data, dewatering volume records, and written requests for discharge to the Engineer for approval prior to discharging any water. The Engineer shall have up to 7 calendar days for review and approval of discharge. Water that does not meet discharge permit requirements shall not be discharged to the storm drainage system, ground water, creeks, streams, lakes, or other water bodies. The Contractor is responsible for either treating such water to meet the permit requirements for discharge or for hauling such water off site to an appropriately licensed liquid disposal facility. In addition, the Contractor may elect to obtain an agreement with the local sanitary sewer district for discharge into their system. The costs associated with any pre-treatment required by the sanitary sewer district or any other disposal methods shall be borne by the Contractor. Penalties assessed against the State for permit non-compliance by the Contractor shall be borne by the Contractor. The Department shall permanently reduce the amount of any contract moneys due or that may become due to the Contractor, by the amount of such penalties.

However, nothing in this section, "Non-Storm Water Discharge," will be construed as relieving the Contractor of full responsibility of complying with Section 7-1.16 "Contractor's Responsibility for the Work and Materials" of the Standard Specifications.

Concrete Wastes. Attention is directed to "Grouted Pipe Pile," "Tiedown Anchors;" "Non-Shrink Grout;" "Elastomeric Concrete;" "Drill and Bond Dowel (Epoxy Cartridge);" "Drill and Bond Dowels;" "Core Concrete (1 7/8", 2 1/4", 4" and 6");" and "Core Concrete (1 1/2", 1 7/8", 2", 2 1/4", 2 1/2", 3", 4", and 7") and Pressure Grout" of these special provisions. The control and disposal of water, abrasives, and residues associated with concrete wastes shall be described within the SWPPP, as specified in "water Pollution Control" of these special provisions. The SWPPP shall, at a minimum, depict and describe the procedural and structural methods of detaining, collecting, and disposing of all concrete wastes. Sufficient redundancy shall be incorporated into the procedural and structural methods such that concrete wastes are not conveyed into or become present in drainage systems, Carquinez Strait, or other water bodies.

Slurries, Liquids, Residues and Debris.-- The control and disposal of slurries, liquids, residues, and debris associated with "Remove Pavement Markers," "Remove Painted Traffic Stripes," "Piling," "Clean and Paint Structural Steel," and "Spot Blast Clean and Paint Undercoat" shall be described within the SWPPP, as specified in "Water Pollution Control" of these special provisions. The SWPPP shall, at a minimum, depict and describe the procedural and structural methods of detaining, collecting, and disposing of all slurries, liquids, residues, and debris associated with the operations. Sufficient redundancy shall be incorporated into the procedural and structural methods such that the liquids, residues, and debris are not conveyed into or become present in drainage systems, Carquinez Strait, or Suisun Bay.

Measurement and Payment.-- 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 affected by this section and no additional compensation will be allowed therefor.

10-1.20A DREDGING

All excavation involved with the removal and disposal of the bay sediment material from the cofferdams (structure excavation) and permanent steel casings (piling) shall be considered dredging under the terms of the various permits obtained by the Department. Attention is directed to "Permits and Licenses," and "Contaminated Material, General," of these special provisions.

The Contractor shall provide construction access to accomplish the work without dredging. Dredging will not be allowed to provide barge or equipment access to the various sites.

Dredging shall be completed by using methods approved by the Engineer to remove and dispose all the material where required to complete the work, in accordance to these special provisions. Unless otherwise authorized in writing, all dredging shall be performed in the presence of the Engineer

Dredging will be limited to the locations specified in these special provisions, and as shown on the plans.

Dredging shall be in accordance with the provisions of the various permits obtained by the Department. All dredged material shall be disposed of according to the permit requirements and these special provisions.

Dredging Plan: Prior to beginning any dredging work, the Contractor shall submit a dredging plan as provided in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications for approval by the Engineer. Dredging shall not commence until all comments have been answered. The plan shall show order of dredging, barge anchoring locations, description of barge overflow operations, description of slurry operations, environmental pollution control measures, instrumentation used, coordinates and land elevations of all control points for electronic positioning system and Mean Sea Level (MSL) determination, estimated daily dredge advances, quality control procedures, anticipated problem areas of project involving poor access due to boat traffic congestion, boat docking, and procedures to assure that dredging will proceed within the contract limits. The quality control information shall include:

- 1) A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the contractor quality control staff shall conduct the inspections for all aspects of the work specified and shall report to the Project Manager, or someone of higher authority, in the Contractor's organization.
- 2) The name, qualifications, duties, responsibilities and authorities of each person assigned a quality control function.
- 3) A copy of the letter to the Contractor's Quality Control (CQC) manager signed by an authorizing official of the firm, which describes the responsibilities and delegates the authorities of the CQC manager shall be furnished and shall be countersigned by the CQC manager acknowledging receipt of responsibilities and duties.
- 4) Reporting procedures and methods used to obtain information for quality control forms, including the submittal of displacement and capacity charts for all scows.

The dredging plan shall be updated on a weekly basis to allow notification to harbor and boat owners of dredge progress. The dredging plan shall include notices, schedules, plans, and controls needed to complete all the required dredging and disposal of material excavated from the Bay.

Overflow: No overflow of dredged material or water will be allowed from the receiving barges, dump scows, or any other transport receptacle during the dredging operations. Overflow will only be allowed if the Contractor includes provisions and operations acceptable to the Regional Water Quality Control Board and is approved in the Storm Water Pollution Prevention Plan prepared by the Contractor, as approved by the Engineer.

During transport to the disposal sites, water and dredged material shall not be permitted to overflow, spill, or leak out of barges or dump scows.

Monitoring of overflow time and leakage shall be as specified for quality control of dredging in these special provisions. The Contractor shall record draft of hull for each scow load as specified under quality control.

In the event the Contractor chooses to fill a receiving barge or dump scow, the receiving vessel shall be located in an approved anchor site in accordance with Section 5-1.22, "Relations With United States Coast Guard," of these special provisions. The Contractor shall be required to perform both a pre-dredge and a post-survey of the anchor site by means of an independent surveyor and the Contractor shall be required to remove any shoals attributed to his operation at no additional cost to the State. Surveys shall be in compliance with the requirements for "Hydrographic Surveys" elsewhere in these special provisions.

Control and Monitoring Surveys: A short to medium range Electronic Positioning System (EPS) or (GPS) Survey System shall be provided on all vessels involved in dredging operations. The EPS shall be established, operated and maintained by the Contractor during the period of the contract when dredging work is actively underway. The EPS using range-range methods shall display and record the vessel's location continuously during dredging and transport for disposal.

The EPS system shall be similar or equal in design, performance, accuracy, operating characteristics, and frequency to those identified in the following technical reference, which is available for purchase at the listed source, or which may be reviewed at the Construction-Operations Division, San Francisco District Office, 333 Market Street, San Francisco, California.

"Hydrographic Surveying"
Department of the Army
Engineering Manual No. 1110-2-1003
28 February 1991
USACE Publications Depot
2803 52nd Avenue
Hyattsville, MD 20781-1102

The Contractor shall be responsible for establishing the horizontal control to locate active and/or passive shore-based EPS transmitter/receiver devices. All control shall meet Third Order, Class I, accuracy standards as defined (and referenced) under chapter 2 of the Army Corps of Engineers Manual "Hydrographic Surveying". The Contractor shall obtain all right-of-entry permits and/or leases as required to operate and maintain shore-based electronic equipment on public/private property at no additional cost to the State.

EPS calibration techniques shall conform to standard hydrographic surveying practice consistent with minimization of systematic errors inherent to and consistent with the selected EPS system as specified under Chapter 6 of the Army Corps of Engineers manual "Hydrographic Surveying". The Contractor shall be responsible for accurate and reliable EPS calibration for the duration of this contract.

Transporting and Upland Disposal: The Contractor shall transport and dispose of the dredged material in accordance with these special provisions. Attention is directed to "Contaminated Material, General", and "Water Pollution Control," of these special provisions and the conditions of the various permits obtained by the State for this contract.

During transport to the disposal sites, water and dredged material shall not be permitted to overflow, spill, or leak out of the barges or dump scows. The maximum tow speed shall be 6 knots for loaded barges.

A complete description of the Contractor's plan for disposal, procedures used and schedules shall be defined in the dredging plan to the satisfaction of the Engineer.

Overflow and Leakage Monitoring Requirements--The Contractor shall furnish a diagram of the location of all overflow weirs for the barges and dump scows indicating the initial elevation of each weir relative to hopper bin curb height. Each change in elevation of a weir during the dredging work shall be indicated on the diagram. For barge overflow, where allowed, the Contractor shall furnish a diagram of the location and elevation of the overflow.

Barges or dump scows having more than 10% loss in draft while transporting material to the disposal site shall be recorded on the daily quality control report and shall not be used until repaired.

MEASUREMENT AND PAYMENT-- Full compensation for preparing dredging plan, control and monitoring surveys, removing, dewatering, testing, transporting and disposing of the dredged material, and monitoring of overflow and leakage in accordance with the standard specifications and these special provisions shall be considered included in the contract price paid for the various items of work involving dredging and no additional compensation will be allowed therefor.

2-1.08 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time- and nontime-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds \$250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

Copies of the proposals submitted by the first, second and third low bidders will be provided to the respective bidders for inclusion in the bid documentation to be escrowed.

The first, second, and third apparent low bidders shall present the bid documentation for escrow at the District 04 Office, 111 Grand Avenue, Room 12-816, Oakland, CA, on the first Monday, at 10:00 a.m., following the time indicated in the "Notice to Contractors" for the opening of bids.

Bid documentation shall be submitted in a sealed container, clearly marked with the bidder's name, date of submittal, project contract number and the words, "Bid Documentation for Escrow."

Failure to submit the actual and complete bid documentation as specified herein within the time specified shall be cause for rejection of the proposal.

Upon submittal, the bid documentation of the apparent low bidder will be examined and inventoried by the duly designated representatives of the Contractor and the Department to ensure that the bid documentation is authentic, legible, and in accordance with the terms of this section "Escrow of Bid Documentation." The examination will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The acceptance or rejection by the Department that the submitted bid documents are in compliance with this section "Escrow of Bid Documentation" shall be completed within 48 hours of the time the bid documentation is submitted by the Contractor.

At the completion of the examination, the bid documents will be sealed and jointly deposited at an agreed commercial bank.

Bid documentation submitted by the second and third apparent low bidders will be jointly deposited at agreed commercial banks. If the apparent low bid is withdrawn or rejected, the bid documentation of the second low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. If the second low bid is withdrawn or rejected, the bid documentation of the third low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. Upon execution and final approval of the contract or rejection of all bids, the bid documentation will be returned to any remaining unsuccessful bidders.

The escrowed bid documentation may be examined by the designated representatives of both the Department and the Contractor, at any time deemed necessary by either the Department or the Contractor to assist in the negotiation of price adjustments and change orders, or in the settlement of claims or disputes.

If requested by a Disputes Review Board, the escrowed bid documentation may be utilized to assist the Board in its recommendations.

The bid documentation submitted by the Contractor will be held in escrow until the contract has been completed, the ultimate resolution of all disputes and claims has been achieved and receipt of final payment has been accepted by the Contractor. The escrowed bid documentation will then be released from escrow to the Contractor.

The bid documentation submitted by the bidder is, and shall remain, the property of the bidder, and is subject to only joint review by the Department and the bidder. The Department stipulates and expressly acknowledges that the submitted bid documentation constitutes trade secrets and will not be deemed public records. This acknowledgment is based on the Department's express understanding that the information contained in the bid documentation is not known outside the bidder's business, is known only to a limited extent and only by a limited number of employees of the bidder, is safeguarded while in the bidder's possession, is extremely valuable to the bidder and could be extremely valuable to the bidder's competitors by virtue of it reflecting the bidder's contemplated techniques of construction. The Department acknowledges that the bid documentation includes a compilation of information used in the bidder's business, intended to give the bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The Department agrees to safeguard the bid documentation, and all information contained therein, against disclosure, including disclosure of subcontractor bid documentation to the Contractor and other subcontractors to the fullest extent permitted by law. However, in the event of arbitration or litigation, the bid documentation shall be subject to discovery, and the Department assumes no responsibility for safeguarding the bid documentation unless the Contractor has obtained an appropriate protective order issued by the arbitrator or the court.

Full compensation for preparing the bid documentation, presenting it for escrow and reviewing it for escrow and upon request of the Engineer shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

The direct cost of depositing the bid documentation in escrow at the agreed commercial bank will be paid by the State.

5-1.39 TIDAL CONDITIONS AND ELEVATION DATUM

Tidal conditions may present significant problems in constructing the work as depicted in the contract plans. Tidal fluctuations may be severe and different from those shown in published tidal and current data due to differences in datum, winter runoff and other causes. Strong currents exist over portions of the project site. Limited time periods of slack water may restrict diving and other underwater activities.

The Contractor is responsible for being knowledgeable of such tidal difficulties, and no payment will be made by the State for any costs incurred by the Contractor in connection with the variations in actual tidal or current conditions during the course of this contract. Any reference to Mean Higher High and Mean Lower Low tides shall be understood to be an estimate used for permit purposes, actual mean tide data shall be determined by the Contractor. All vertical control datum is based on the National Geodetic Vertical Datum of 1929.

5-1.40 SOUND CONTROL REQUIREMENTS

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the Standard Specifications and these special provisions.

The noise level from the Contractor's operations, between the hours of 7:00 p.m. and 8:00 a.m., shall not exceed 86 dbA at a distance of 50 feet. No pile driving operation, except when using vibratory hammers only, will be allowed between the hours of 7:00 p.m. and 8:00 a.m. This requirement in no way relieves the Contractor from Said responsibility for complying with local ordinances regulating noise level.

Said 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 will be allowed therefor.

5-1.41 CONTAMINATED MATERIAL, GENERAL

Attention is directed to "Earthwork" of these special provisions regarding the removal and disposal of contaminated material.

Contaminated material have been discovered through testing within the project limits. Portions of the test results are included in the "Materials Information Handout." The complete report is available for inspection at the Department of Transportation, Toll Bridge Program Duty Senior's Desk, 111 Grand Avenue, Oakland, California, (510) 286-5549. The levels of contamination are considered to be designated waste as defined by State of California regulations.

Temporary stockpiling of contaminated material on land for dewatering purposes will be allowed for 30 days beginning on the first day of transport to land. A stockpiling plan conforming to Department of Toxic Substances Control (DTSC) standards shall be submitted to the Engineer for review and approval at least 15 calendar days prior to performing any stockpiling. This plan shall be addressed in storm water pollution prevention plan. Temporary stockpiling of material shall be considered at and for the convenience of the Contractor. Full compensation for stockpiling of material, including removing said stockpile shall be considered as included in the contract price paid per cubic yard for the various items involved with contaminated material of the types listed in the Engineer's estimate and no separate payment will be made therefor. No contaminated material shall be deposited on public roads. The Contractor shall indemnify the State from any costs due to spillage during the transport of the contaminated material to the disposal facility.

All contaminated material on exteriors of transport vehicles shall be removed and placed either into the current transport vehicle or the excavation prior to the vehicle leaving the exclusion zone.

The Contractor shall monitor the air quality continuously during clean out operations at all locations containing contaminated material.

APPLICABLE RULES AND REGULATIONS.--Excavation, transport and disposal of contaminated material shall be in accordance with the rules and regulations of the following agencies:

United States Department of Transportation (USDOT)
United States Environmental Protection Agency (USEPA)
California Environmental Protection Agency (CAL-EPA)

1. Department of Toxic Substance Control (DTSC)
2. Integrated Waste Management Board
3. Regional Water Quality Control Board, Region 2 (RWQCB)
4. State Air Resources Board

Bay Area Air Quality Management District (BAAQMD)
California Division of Occupational Safety and Health Administration (CAL-OSHA)

PERMITS AND LICENSES.--The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work, including registration for transporting vehicles carrying the contaminated material and the hazardous material. The California Environmental Quality Act (CEQA) of 1970 (Chapter 1433, Stats. 1970), as amended may be applicable to permits, licenses and authorizations which the Contractor shall obtain from all agencies in connection with performing the work of the contract. The Contractor shall comply with the provisions of said statutes in obtaining such permits, licenses and other authorizations.

The Engineer will obtain the Environmental Protection Agency Generator Identification No. and Board of Equalization Identification Number as the State is the Generator.

SITE SPECIFIC HEALTH, SAFETY AND WORK PLAN.--The Contractor shall prepare a detailed Health, Safety and Work Plan for all site personnel in accordance with the DTSC and CAL-OSHA regulations. The Health, Safety and Work Plan shall include a plot plan indicating the exclusion zones, contaminant reduction (decontamination zones) and support zones in accordance with California Code of Regulations (CCR), Title 8, an air

monitoring plan, site clean up procedures, and physical barrier; and shall be submitted at least 15 working days prior to beginning any work for review and acceptance by the Engineer. Prior to submittal, the Contractor shall have the Health, Safety and Work Plan approved by a Civil Engineer, registered in the State of California and by a Certified Industrial Hygienist.

SAFETY.--Prior to performing any work at the locations containing material classified as contaminated, all personnel, including State Personnel, shall complete a safety training program which meets 29 CFR 1910.120 and 8 CCR 5192 covering the potential hazards as identified. The training shall be provided by the Contractor. The Contractor shall provide a certification of completion of the Safety Training Program to all personnel. Any personal protective equipment required by the Contractor's Health, Safety and Work Plan for personnel working within the exclusion zone will be supplied to State personnel by the Contractor. The number of State personnel requiring the above mentioned safety training program and personal protective equipment will be 5.

The decontamination area shall be located outside of the exclusion zone. Water from decontamination procedures shall be collected and disposed of at an appropriate disposal site by the Contractor. Non-reusable protective equipment, once used by any personnel, including State personnel, shall be collected and disposed of at an appropriate disposal site by the Contractor. Temporary 6-foot chain link security fence shall be installed to surround and secure the exclusion zone.

SAMPLING AND ANALYSIS.--The Contractor shall test all excavated material designated for disposal, at his own expense for any additional acceptance requirements put forth by the disposal facility. Sampling and analysis shall be performed using the sampling and analysis criteria required by the disposal facility. The Contractor shall submit for approval by the Engineer, his sampling and analysis procedure and the name and address of the laboratory to be used 15 working days prior to beginning any sampling or analysis. The laboratory used shall be certified by the California Department of Health Services.

MEASUREMENT AND PAYMENT. 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 affected by this section and no additional compensation will be allowed therefor.

DEPARTMENT OF TRANSPORTATION

ESC/OE MS #43
P.O. Box 942874
SACRAMENTO, CA 94274-0001



TDD (916) 654-4014

January 9, 1998

04-CC,Sol-680-25.0/25.5,L0.0/0.6
04-0440U4

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.8 MILE NORTH OF MOCOCO OVERHEAD TO BENICIA-MARTINEZ BRIDGE TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 21, 1998.

This addendum is being issued to revise the Project Plans and the Notice to Contractors and Special Provisions.

Project Plan Sheets 47, 56, 132 and 133 are revised. Half-sized copies of the revised sheets are attached for substitution for the like numbered sheets.

In the Special Provisions, Section 5-1.34, "Transportation For The Engineer" is revised as attached.

In the Special Provisions, Section 10-1.01, "Order Of Work", the thirteenth paragraph is revised as follows:

"At each pier, except piers 3 and 13, all foundation retrofit work shall be completed prior to beginning pier wall retrofit work. Additionally, once work has started at a pier, all work at that pier shall be constructed diligently to completion. For piers 3 and 13, work within existing pier cells can be completed before foundation retrofit work is complete."

In the Special Provisions, Section 10-1.21, "Piling", the sixteenth paragraph after subsection "Grouted Pipe Pile" is revised as follows:

"The equipment used to drill or core through concrete filled caissons may be required to change direction of drilling during the progress of the work."

In the Special Provisions, Section 10-1.30, "Elastomeric Concrete", note numbers of the seventh, eighth, ninth and tenth paragraphs are revised to read "Note 1, Note 2, Note 3 and Note 4", respectively.

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.
- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

5-1.34 TRANSPORTATION FOR THE ENGINEER

The Contractor shall provide transportation for the Engineer in accordance with Section 5-1.08, "Inspection," of the Standard Specifications and these special provisions.

The Contractor shall provide, operate, berth and maintain, throughout the life of the contract, 2 commercial grade work boats for the sole use of the Engineer and the Engineer's staff in performance of their work. In addition, the Engineer and all authorized representatives of the State, acting within the scope of their duties in connection with the work under this contract, shall be permitted to ride as passengers, without charge, on any boat operated by, or for, the Contractor for the transportation of personnel, equipment or materials. It is agreed that such transportation will be only on boats that are making trips in connection with the Contractor's operation.

The commercial grade work boats shall be 25-foot Sentry Boston Whaler, Mako 253, or equal, meeting or exceeding the following minimum requirements:

- DRIVE POWER:

-

- 1) Outboard-2 each 150 HP Engines
- 2) Fuel Tank-built in 173 gal. tank

-

- EQUIPMENT:

-

- 1) HD Rubbing Strakes-set of four
- 2) Stainless Steel Cut Water
- 3) Heavy Duty Bow- Eye Reinforcement
- 4) Stern Splashwell Bulk Head
- 5) High patterned side rails
- 6) Heavy Duty Lifting Eyes
- 7) Twin Cylinder Steering Upgrade
- 8) Extra 95 amp battery dual engine
- 9) Push to start panel upgrade, dual engine
- 10) Hydraulic twin tabs
- 11) Full width stern seat
- 12) Deck utility box
- 13) Rubber Bumpers - 6 ea., 4" dia.
- 14) 30 lb. anchor with chain and line (adequate for specific site condition)

-

- ELECTRONICS:

-

- 1) VHF/FM Radio System
- 2) One (1) Com 58 or equal
- 3) Radar system Furuno 1731 or equal
- 4) Depth finder digital
- 5) Compass Richie navigator 2 each or equal

-

- SAFETY & EMERGENCY EQUIPMENT

-

- 1) United States Coast Guard required commercial grade safety and emergency equipment
- 2) Navigation lights, commercial U.S. Coast Guard approved
- 3) San Francisco Bay Navigation Charts appropriate for the project requirements
- 4) United States Coast Guard-approved life jackets for the Contractor's personnel.

-

United States Coast Guard-approved life jackets for the Contractor's personnel shall be provided and maintained on the boats at all times, as required by the United States Coast Guard. Life jackets for the Department's visitors and representatives will be provided by the Department at no cost to the Contractor.

The contractor shall provide for the Department's visitors and representatives safe and protected permanent vertical access, as approved by the Engineer, to all marine construction equipment being utilized for construction of the project.

REVISED PER ADDENDUM NO. 2 DATED JANUARY 9, 1998

The Contractor shall provide safety training relative to marine transportation to the State's and the Contractor's personnel, prior to the commencement of work. Training shall include a review of the approved U.S. Coast Guard Safety Manual by all personnel prior to using the Contractor's provided marine transportation. The Contractor shall also conduct a quarterly Marine Safety Workshop for the Department's representatives.

The Contractor shall furnish a licensed boat operator and crew members, as required for the boat's operation and in accordance with all Maritime Agreements and Laws, including, but not limited to, the regulations contained in Title 46 Code of Federal Regulation Section 16 and Sections 24 through 26. The boat operator and crew shall be furnished for 10 hours each working day.

The Contractor shall provide insurance coverage under the Federal Longshoremen's and Harbor Workers Compensation Act, the Jones Act and the Marine Act with respect to work performed from, or by use of, vehicles on any navigable water of the United States, including liability insurance for watercraft operations. At the option of the Contractor, liability insurance for watercraft operations may be covered under a separate Protection and Indemnity policy, provided the policy contains a combined single limit of at least \$50,000,000 per occurrence and \$50,000,000 aggregate.

The Contractor shall provide berthing facilities at the same location the Contractor utilizes for the departure of its construction crew, or at an alternate location approved by the Engineer.

The Contractor shall maintain the boats provided to the Engineer, including daily fueling, routine maintenance, equipment compliance, systems operations and the immediate repair of damage to the boats or their elements.

The boats shall remain the property of the Contractor. The boats shall not be removed from the site of the work until after acceptance of the contract.

The contract lump sum price paid for transportation for the engineer shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in providing transportation for the engineer as specified herein.

Payment for furnishing a boat operator and crew in excess of 10 hours within any working day will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications. No additional payment will be made for furnishing the boats in excess of 10 hours within any working day.

DEPARTMENT OF TRANSPORTATION

ESC/OE MS #43
 P.O. Box 942874
 SACRAMENTO, CA 94274-0001



TDD (916) 654-4014

January 12, 1998

04-CC,Sol-680-25.0/25.5,L0.0/0.6
 04-0440U4

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.8 MILE NORTH OF MOCOCO OVERHEAD TO BENICIA-MARTINEZ BRIDGE TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 21, 1998.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Engineer's Estimate.

On Project Plan Sheet No. 4, Concrete Barrier (Type 25) is revised to Concrete Barrier (Metal Faced).

On Project Plan Sheet No. 4, along "B" Line Station 82+49 to 82+65, Concrete Barrier (Type 50A Mod) is revised to Concrete Barrier (Metal Faced).

On Project Plan Sheet No. 5, Concrete Barrier (Type 25) is revised to Concrete Barrier (Metal Faced).

On Project Plan Sheet No. 5, along "B" Line Station 131+43 to 131+59, Concrete Barrier (Type 50A Mod) is revised to Concrete Barrier (Metal Faced).

On Project Plan Sheet No. 20, the Concrete Barrier (Type 25) table is deleted.

On Project Plan Sheet No. 20, the Concrete Barrier (Type 50A Mod) table is revised as follows:

CONCRETE BARRIER (TYPE 50A MOD)

LOCATION	LF
"B" 82+32 TO 82+49	17
"B" 82+65 TO 82+82	17
"B" 131+26 TO 131+43	17
"B" 131+59 TO 131+76	17
TOTAL	68

On Project Plan Sheet No. 25 in the "Benecia - Martinez Br. (Retrofit) Main Span Quantities" table, the quantities for the following items are revised as follows:

"Drill and Bond Dowel (Epoxy Cartridge)	2308 EA
Spot Blast Clean And Paint Undercoat	55200 SQFT
Concrete Barrier (Metal Faced)	96 LF"
Concrete Barrier (Type 25)	64 LF (DELETED)"

On Project Plan Sheet No. 72, PART ELEVATION - FLOOR BEAM / DECK CONNECTION, the left most 7/8" Ø HS threaded rod is deleted.

On Project Plan Sheet No. 72, SECTION A-A, the phrase "Remove exist 7/8" Ø bolts" is deleted from the callout.

On Project Plan Sheet No. 72, SECTION A-A, the installation of washers and nuts on the top side of the exist top flange plate is not required.

On Project Plan Sheet No. 72, SECTION B-B, the phrase "Remove exist bolts" is deleted from the lower right note.

On Project Plan Sheet No. 72, SECTION B-B, installation of the left two 7/8" Ø HS threaded rods shown is deleted. Each of the remaining six 7/8" Ø HS threaded rods to be installed are relocated 3 1/2" left of their shown location such that all 7/8" Ø HS threaded rods are between existing bolts.

On Project Plan Sheet No. 72, SECTION B-B and PART ELEVATION - FLOOR BEAM / DECK CONNECTION the total amount of 7/8" Ø HS threaded rods is revised to 12.

On Project Plan Sheet No. 98, "Side Barrier Transition Elevation View", the phrase "Limits of Concrete Barrier Removal" is deleted.

On Project Plan Sheet No. 98 the following notes are added after the seventh note:

- "8. For limits of concrete barrier reconstruction, see "Road Plans".
- 9. For details not shown, see Standard Plans Sheet B11-53."

On Project Plan Sheet No. 99, "Median Barrier Transition Elevation View", the phrase "Limits of Concrete Barrier Removal" is deleted.

On Project Plan Sheet No. 99, "Median Barrier Transition Elevation View", the phrase "See Note 5" is added after the phrase "Pay Limits of Concrete Barrier (Metal Faced).

On Project Plan Sheet No. 99 the following notes are added after the fourth note:

- "5. For limits of concrete barrier reconstruction, see "Road Plans".
- 6. For details not shown, see Standard Plans Sheet A75A."

In the Special Provisions, Section 5-1.34, "Transportation For The Engineer", in the second paragraph, the quantity of commercial grade work boats is revised to 1.

In the Special Provisions, Section 10-1.31, "Drill And Bond Dowel (Epoxy Cartridge)" the following paragraph is added after the eighth paragraph:

"Holes through steel top flange plate shall be drilled in accordance with the provisions in "STEEL STRUCTURES" elsewhere in these special provisions. The diameter of the drilled holes shall not vary between steel and concrete portions."

In the Special Provisions, Section 10-1.31, "Drill And Bond Dowel (Epoxy Cartridge)" the fourteenth paragraph is revised as follows:

"The contract unit price paid for drill and bond dowel (epoxy cartridge) shall include full compensation for furnishing all labor, materials (except reinforcing steel dowels and threaded rods), tools, equipment and incidentals, and for doing all work involved in drilling the holes through steel and concrete, including coring through reinforcement when approved by the Engineer, and bonding the dowels with epoxy cartridges, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Special Provisions, Section 10-1.36, "Steel Structures" the second paragraph of subsection "Replace Fasteners" is revised as follows:

"The Contractor shall submit to the Engineer for approval the proposed method of fastener replacement. Fastener removal will not be permitted until the replacement method has been approved by the Engineer."

In the Special Provisions, Section 10-1.36, "Steel Structures" the fifth paragraph of subsection "Replace Fasteners" is deleted.

In the "Copy of Engineer's Estimate" in the NOTICE TO CONTRACTORS and the "Engineer's Estimate" in the PROPOSAL, Items 39, 65, 70 and 71 are revised and Item 69 is deleted as attached.

To Proposal and Contract book holders:

- REPLACE PAGES 4 AND 6 OF THE ENGINEER'S ESTIMATE IN THE PROPOSAL WITH THE ATTACHED REVISED PAGES 4 AND 6 OF THE ENGINEER'S ESTIMATE. THE REVISED ENGINEER'S ESTIMATE IS TO BE USED IN THE BID SUBMITTAL AND INSERTED IN THE PROPOSAL.
- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.
- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

ENGINEER'S ESTIMATE

04-0440U4

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	159101	RAISE BRIDGE	LS	LUMP SUM	LUMP SUM	
22 (F)	192008	STRUCTURE EXCAVATION (TYPE A)	CY	2,260		
23 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	385		
24 (S)	046946	GROUTED PIPE PILE	LF	13,000		
25	046947	INSTALL SEISMIC MONITORING CASING	LF	135		
26 (S)	046948	DRILLED SHAFT LOAD TEST PILE	EA	4		
27 (S)	046949	GROUTED PIPE LOAD TEST PILE	EA	4		
28 (S)	046950	LOAD TESTING DRILLED SHAFT PILE	EA	4		
29 (S)	046951	LOAD TESTING GROUTED PIPE PILE	EA	4		
30 (S)	046952	66" DRILLED SHAFT	LF	1,760		
31 (S)	046953	72" PERMANENT STEEL CASING	LF	4,400		
32 (S)	500010	PRESTRESSING	LS	LUMP SUM	LUMP SUM	
33 (S)	500060	TIEDOWN ANCHOR	EA	44		
34	510000	SEAL COURSE CONCRETE	CY	1,600		
35 (F)	046954	STRUCTURAL CONCRETE, TREMIE PLACED	CY	4,770		
36 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	13,900		
37 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	13,240		
38	511106	DRILL AND BOND DOWEL	LF	154,220		
39	511109	DRILL AND BOND DOWEL (EPOXY CARTRIDGE)	EA	2,308		
40 (S)	046955	CORE CONCRETE (2 1/4")	LF	90		

ENGINEER'S ESTIMATE

04-0440U4

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61 (S-F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	11,592,000		
62 (S-F)	550203	FURNISH STRUCTURAL STEEL (BRIDGE)	LB	3,030,000		
63 (S-F)	550204	ERECT STRUCTURAL STEEL (BRIDGE)	LB	3,030,000		
64 (S)	590115	CLEAN AND PAINT STRUCTURAL STEEL	LS	LUMP SUM	LUMP SUM	
65 (F)	590135	SPOT BLAST CLEAN AND PAINT UNDERCOAT	SQFT	55,200		
66 (S)	590301	WORK AREA MONITORING	LS	LUMP SUM	LUMP SUM	
67	011810	10" WATER LINE EXPANSION JOINT	EA	2		
68 (S-F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	262,000		
69	BLANK					
70 (F)	046974	CONCRETE BARRIER (METAL FACED)	LF	96		
71	839484	CONCRETE BARRIER (TYPE 50A MODIFIED)	LF	68		
72	839510	HEADLIGHT GLARE SCREEN	LF	100		
73	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	4,080		
74	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	112		
75	850102	PAVEMENT MARKER (REFLECTIVE)	EA	56		
76	011811	MAINTAIN TRAFFIC MONITORING STATIONS	LS	LUMP SUM	LUMP SUM	
77	046975	SEISMIC MONITORING ELECTRICAL SYSTEM	LS	LUMP SUM	LUMP SUM	
78	011914	TIME RELATED OVERHEAD	WDAY	985		
79	011915	TRANSPORTATION FOR ENGINEER	LS	LUMP SUM	LUMP SUM	
80	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____

DEPARTMENT OF TRANSPORTATION

ESC/OE MS#43
P.O. Box 942874
SACRAMENTO, CA 94274-0001



TDD (916) 654-4014

January 16, 1998

04-CC,Sol-680-25.0/25.5,L0.0/0.6
04-0440U4

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.8 MILE NORTH OF MOCOCO OVERHEAD TO BENICIA-MARTINEZ BRIDGE TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 21, 1998.

This addendum is being issued to provide a copy of Contractor's Inquiry Responses No. 1 dated January 16, 1998.

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.
- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachment

CONTRACTOR'S INQUIRY RESPONSES NO. 1,

JAN 16, 1998

MORE RECENT INQUIRIES

CALTRANS TOLL BRIDGE RETROFIT PROGRAM ADDRESS

The Caltrans District 4 Office is located at 111 Grand Avenue, Oakland, Ca 94612. The mailing address is P.O. Box 23660, Oakland, Ca 94623-0660. The Toll Bridge Retrofit Duty Senior telephone number is (510) 286-5549, and the fax number for Contractor's inquiries submittals is (510) 286-4563

Would contract plan electronic files be available to contractor?

Contract plan electronic files will not be available to contractors.

Coastwise trade determination for qualified barges.

"A non-coastwise qualified barge may be used as a moored stationary work platform within the territorial waters of the United States without violating the coastwise laws, provided that it transport neither passengers nor merchandise while under tow between coastwise points." Contractors have to get all the appropriate permits from the US Coast Guard.

Does the worker's compensation insurance for this project fall under the jurisdiction of the United States Longshore and Harbor Worker Act or the Jones Act?

The Jones Act (46 U.S.C. & 13 et seq.) applies to seamen and shipping and does not relate to construction workers on the bridge. The Longshore and Harbor Workers' Compensation Act (33 U.S.C. & 901 et seq.) applies to employees engaged in maritime employment. A federal court decision of the Fourth Circuit Court of Appeals has held that a construction worker employment in building a bridge over navigable water, designed to benefit both traffic and navigation, is engaged in maritime employment under the Longshore and Harbor Workers' Compensation Act. (LeMelle v. B.F. Diamond Const. Co.)(1982) (674 Fed2.d 296). Under California law (Lab. Code & 3700), every employer is responsible for being insured against liability to pay workers' compensation. That responsibility is incorporated into the Department of Transportation's (Department) construction contracts under the provisions of the Standard Specifications Section 7-1.01(A)(6) that requires the construction contractor to certify compliance with Labor Code Section 3700.

How much ship traffic can be anticipated in the ship channel during the life of the project?

Please refer your attention to the Outside Agencies listed under Section 5-1.23, "Relations with U.S. Coast Guard," in Sub-section "Mooring Plan." These listed agencies might provide you upon request with their projected ship traffic for the life of the projects.

Refer to Regionwide Permit # RWP-9, Notice of Intent to Proceed # NO1-96-43, Dated March 14, 1997, Page 6, Paragraph I. a) How does the Contractor determine if the clapper rail and/or the peregrine falcon are present?

By Visual Inspection.

b)What is the potential for either to become present during the life of the contract?

Very minimum, no evidence of their presence has been found at this location.

If either the clapper rail or the peregrine is present what are the methods of relief available to the contractor in terms of schedule, extended overhead, etc.

Any delay created by their presence, will be considered as a right of way delay.

We would like to obtain the computer model and acceleration time history as described in the special provisions. Specifically: Will you provide both the IAI-NEABS and ADINA models to us?

The IAI-NEABS and ADINA models are available on disc. Please provide your address and we will overnight mail them to you.

Please tell us how and where to obtain the software to use the IAI-NEABS models.

Imbsen and Associates will provide a copy of the executable code for IAI-NEABS and the most updated users manual. This program will be provided , free of charge, for a period of three months. Since the program is not for sale Imbsen will not be providing technical support that a user may need. The program is available for PC or SUN Sparc workstation (OS 3.1). To obtain the program contact David Liu at:

Imbsen and Associates
9912 Business Park Drive, Suite 130
Sacramento, Ca. 95827
Phone (916) 366-0632
Fax (916) 366-1501

Can "Seismic Energy Products" be recognized by Caltrans as an approved Alternative Bearing prior to the bid opening?

No.

A dimension is missing in Section B-B on contract plan sheet 136 of 190. While trying to verify pay quantities for bid item 37 - Structural Concrete, Bridge, it seems that a dimension is needed to adequately take off the portion pertaining to the piers. Section B-B shows the height of the columns, and the height of the sloping concrete walls, however the remaining dimension is absent for said piers.

The elevation for the rocker bearings is provided in the rocker bearing details in the As-built plans. The top of concrete pier elevation can be calculated from the rocker bearing elevation provided.

In reference to details on contract plan sheets 134, 135, 137, and 139 of 190. Section D-D on sheet 134 shows the #5 bar to be drilled and bonded at 16" horizontally and 12"O.C. vertically. However, Section J-J on sheet 135 shows what appears to be the same bar drilled and bonded at 12"O.C. bothways. Which bar spacing is correct.

There is no conflict, Section D-D is taken through the upper wall, above the slab, and applies only in that region. The drill and bond note referred to in Section J-J applies only to the pier section below the slab.

Please send drawings and information required for us to review and quote on the "seismic isolator bearing replacement" portion of the project.

To order contract plans and special provisions call (916) 654-4490. As-built drawings are available for viewing through Mr. Yader Bermudez at (510) 286-5549.

Reference sheet 116 of 190 "PIERS 3 & 13 FOOTING RETROFIT DETAILS NO. 2." Note 7 states that "Whenever new concrete is to be placed against existing concrete, the existing concrete surface shall be roughened to 1/4" amplitude." Does this note also apply to Piers 4 through 12?

Note 7 applies to the details on this sheet, Piers 3 and 13.

Can the cofferdams at piers 3 and 13 be braced against the existing concrete structure? If so, what loads would be allowed?

Your attention is directed to Section 15 "Existing Highway Facilities" of the Standard Specifications.

Reference specification 10-1.25 "CONCRETE STRUCTURES" which states that "The concrete for the new exterior and interior pier walls which are in contact with the existing concrete shall be placed at a rate not to exceed 4 vertical feet per hour, or in lifts not exceeding 15 feet in height. Such concrete shall be revibrated just prior to the initial set." Please clarify the revibration requirement.

Unless an addendum is issued with clarification, bid what is currently in the plans and specifications.

Reference Piers 4 through 12. Can the HS threaded rods in the lower 15 feet of the footing for cells 1 through 8 be drilled and installed after the grouted pipe pile installation? There is a potential for damage to the HS threaded rods, which are spaced at 24-inches on center, when drilling the 17-inch diameter pipe pile hole.

The high strength threaded rods referred to may be installed after installing the grouted pipe pile.

The drawings indicate NGVD 1929 Datum. Please provide the elevations of Mean Sea Level, M.L.L.W., and M.H.H.W. at the bridge.

Check the following internet websites: National Weather Service: <http://www.nws.mbay.net/marine.html>, Office of Ocean and Earth Sciences: <http://www.opsd.nos.noaa.gov/tides/westSF.htm>

Please provide the elevations of the top of Piers 4 through 12.

The elevation for the rocker bearings is provided in the rocker bearing details in the As-built plans. The top of concrete pier elevation can be calculated from the rocker bearing elevation provided.

Can the Contractor work on more than one new drilled caisson at a time at any one pier foundation?

No restrictions are specified.

Reference 10-1.04 ENVIRONMENTALLY SENSITIVE AREA. Please define the limit of the "shoreline" (i.e. contour elevation).

All areas between the water line and contour elevation 40. The ESA area is also delineated on plan sheet 5 of 190.

May alternative methods of joint preparation such as a bonding agent be used in lieu of roughening the concrete?

Bid what is specified in the contract. Alternative construction methods would be reviewed after award of the contract. There is no guarantee of approval.

Regarding U.S. Coast Guard Letter # 16591, dated July 10, 1996, Paragraph 5.
a) Please provide the time frame of winter-run chinook salmon. b) How does the contractor determine if construction will occur in an area involving the winter-run chinook salmon? c) What restrictions will be imposed upon the contractor so as not to impact the species? d) What are the methods of relief available to the contractor in terms of schedule, extended overhead, etc..

a) Winter season. b) & c) Normal construction operations should not impact the winter-run chinook salmon, therefore, no special requirements are specified in the permits. d) We do not anticipate any construction delay due to the winter-run chinook salmon.

Regarding Special provision 5-1.21, Relations with U.S. Army Corps of Engineers. Item #1- "All work performed within the Carquinez Strait in areas of 10' or less at Low Low Water shall occur only between December 1 and March 31 of the following year." Regarding Department of Army Letter File # 22066N. Item #1- "All work performed within the Carquinez Strait (in areas below 3 meters at mean Low Low Water) shall occur between December 1 and March 31." a) Please clarify the intent of the permit. b) What work operations will be controlled by this specification? c) Is the work inside the cofferdam or inside the existing footing considered to be "work performed within the Carquinez Strait" as specified in the above paragraph? d) Will work from a barge located in water with depth less than 10' or less at Low Low Water be prohibited by this specification

a) The intent of the permit is to do all work located in areas where the depth of the water is 10 feet or less at Low Low Water only between December 1 and March 31." b) All work outside of the cofferdam will be prohibited by this specification. c) Work within the cofferdam is OK between December 1 and March 31 period. However, cofferdams shall be built only during this time period. d) Barges could be setup in these areas as long as they remain floating. However, work from these barges will be restricted to work only within the cofferdams.

Regarding Regionwide Permit #RWP-9, Notice of Intent to Proceed #NOI-96-43, dated March 14, 1997, paragraph I. If a clapper rail nest is found, will the restricted area be limited to within a 500' radius of the nest or will include an area with a perimeter of 500' from the project boundary?

The restricted area will be limited to within a 500' radius of the nest.

Section 10-1.21 Piling Page 98 Section labeled "Construction", the second paragraph states, "The equipment used shall be capable of correcting the direction of drilling during the process of the work." We are not aware of any equipment capable of changing direction, only equipment capable of maintaining direction. Please provide a clarification on the statement and potentially a list of subcontractors capable of meeting this specification.

The following companies have the technology for "Directional Drilling" or MWD (Measure While Drilling)":

WELNAV Co.
Tustin Ca.
Contact: Charles Ron Adams (714)259-7760
(714)259-7761

Christensen Drilling
Salt Lake City, Utah

Contact: Mike Harten
(541)857-6892
(800)453-8418

Scientific Drilling
Houston, Texas
Contact: Pierre Bessiere(281)443-3300

Volkens Directional Drillers
Dyersville, Iowa
(319)875-7011
(319)590-1453

The jacking shoe on the truss shown on Sheet 90 & 92/190 does not line up with the bearing area of the Pier shown on Sheet 93/190. In fact the jacking point on the truss is offset from the area just as shown in the plan view. Considering the size of the loads to be jacked and the size of the jacks required, the jacks will block the installation of the masonry plate and the bearing assembly if located under the jacking shoe. It appears the jacking shoe on the truss needs to be located farther away from the center of the bearing. Please advise.

The details on contract plan sheet 93 of 190 correctly show the relative offset of the jacking point with respect to the bearing area. Your attention is directed to Section 10-1.19 C, "RAISE BRIDGE" of the special provisions. Per these provisions, design of jacking assemblies and supporting systems are the Contractors responsibility.

Additionally the bearing area below the jacks does not appear to be of sufficient size to maintain the 1500 PSI bearing limit. Please advise.

Any portion of the top of pier may be used to distribute the jacking load as long as the specified maximum bearing pressure is not exceeded. Additionally the provisions in Section 10-1.19 C, "RAISE BRIDGE" state that alternative jacking procedures may also be proposed by the Contractor which will be subject to the approval of the Engineer.

What is the purpose of the reaction block shown on sheet 93 / 190?

The reaction blocks are for bridge maintenance and may be used in the future to re-center displaced bearings.

The access openings in the existing concrete structures as indicated on the drawings are limited in comparison to the amount of work required inside the piers. Can additional access openings be made, particularly on top of Piers 3 & 13?

The access opening locations shown on the contract plans are at locations of minimal service load stress concentration. Alternative access opening locations will be subject to review and approval by the Engineer after the bid opening.

It is possible that water will be encountered inside of the existing footings of Piers 4-12. How will the Contractor get paid for dewatering the cells?

Your attention is directed to the third paragraph in Section 51-1.05 "Forms", the last paragraph in Section 51-1.09, "Placing Concrete" and the second paragraph of Section 51-1.23, "Payment" of the Standard Specifications. Intent - water is to be removed if encountered and is part of the contract work.

Specification 10-1.25 "CURING" states that "the formed surfaces which will

be exposed in the completed work shall be cured by the forms- in- place method." This method requires that the concrete forms remain in place for seven days. This adds a tremendous amount of time to an already tight schedule. Can an alternative curing method be permitted that would allow a shorter form stripping duration.

Alternative curing methods will be subject to review and approval by the Engineer after the bid opening. The forms in place method was selected for uniformity of appearance.

Section 5.1-34 requires two working boats be provided and operated for the duration of the contract. Will Caltrans require the boat operator and crew members for these boats to work a full ten hour day for each working day of the contract, including Saturday, Sundays, and holidays? Will the boat crews be required if the Contractor is not actually working a particular Saturday or Sunday?

The Contractor shall provide the boats and crews for every day that the Contractor is scheduled to work including Saturdays, Sundays, and Legal Holidays.

Section 5-1.21, page 23, note 4, Temporary construction platforms of approximately 9,000 sf at Pier 3 and at Pier 13 will be required. Please confirm that these temporary platforms are permitted under the "temporary fill" definition, and allowed by the contract.

The area for temporary construction platforms shall not extend more than 50 feet in all directions from the existing foot pier, which would be within the center of the platform.

Special Provision 5-1.26, "Utilities," The contractor will not be permitted to use existing State utilities on the bridge or within the contract limits. Will the State owned compressed air lines be available for contractor use if contractor supplies the compressed air?

No.

Reference sheet 116 of 190 "PIERS 3 & 13 FOOTING RETROFIT DETAILS NO. 2." Note 7 states that "Whenever new concrete is to be placed against existing concrete, the existing concrete surface shall be roughened to 1/4" amplitude." Does this note also apply to Piers 4 through 12?

Note 7 applies to the details on this sheet, Piers 3 and 13.

Can the cofferdams at piers 3 and 13 be braced against the existing concrete structure? If so, what loads would be allowed?

Your attention is directed to Section 15 "Existing Highway Facilities" of the Standard Specifications.

Reference specification 10-1.25 "CONCRETE STRUCTURES" which states that "The concrete for the new exterior and interior pier walls which are in contact with the existing concrete shall be placed at a rate not to exceed 4 vertical feet per hour, or in lifts not exceeding 15 feet in height. Such concrete shall be revibrated just prior to the initial set." Please clarify the revibration requirement.

Your attention is directed to Contract Addendum No. 1 dated December 23, 1997.

Reference Piers 4 through 12. Can the HS threaded rods in the lower 15 feet of the footing for cells 1 through 8 be drilled and installed after the grouted pipe pile installation? There is a potential for damage to the HS

threaded rods, which are spaced at 24-inches on center, when drilling the 17-inch diameter pipe pile hole.

The high strength threaded rods referred to may be installed after installing the grouted pipe pile. Your attention is directed to Contract Addendum No. 1 dated December 23, 1997.

Regarding contract plan sheet 120 of 190 under Description of Bridge Work and Construction Sequence, step #5: "Construct upper reinforced concrete footing cap in cells 1 through 10 for piers 5 through 11 and cells 1 through 8 for piers 4 through 12. Strengthen walls in the remaining cells."

Regarding section 51-1.13 "Bonding" of the the Standard Specifications: "When existing structures are to be modified, construction joints between new and existing concrete shall be cleaned and flushed as specified herein for horizontal joints." Surface prep for horizontal joints is described accordingly, "Abrasive blast methods shall be used to clean horizontal construction joints to the extent that clean aggregate is exposed."

Question: For cells that are filled with concrete, what type of surface preparation of the existing concrete will be required, i.e. mechanical roughening, sandblast, high pressure water blast, or do nothing???

The requirements of Section 51-1.13 "Bonding" of the Standard Specifications apply. Additionally your attention is directed to Contract Addendum No. 1 dated December 23, 1997.

Please confirm the minimum intervals at which construction joints can be placed in pier 3 and 13 footings and extensions.

Only vertical construction joints shown in the plans are due to the sequence of partial bridge removal segments as shown on contract plan sheet 114 of 190. All other construction joint locations are subject to approval of the Engineer.

To which pay items do the following belong: Jacking brackets at piers 3 & 13(which are turned over to the State at job end), Jacking brackets at pier 4...attached to posts, Bolts to fill open holes at removed jacking material @ piers 5 through 12.

Furnish and Erect Structural Steel (Bridge).

With reference to Special Provision 10-1.36 "STEEL STRUCTURES" , Page 136, last paragraph re:clause REPLACE FASTENERS.... There is numerous reference to blasting and painting requirements for new and existing contact surfaces and under bolt heads (replaced) and the above referenced clause specifies that cleaning and painting in accordance with the provisions of the specifications is required " before any existing adjacent fastener is removed". AASHTO spec 11.5.6.3(-3) specifies that coated joints shall not be assembled before coating has cured for the minimum time used in quantifying the test. (This would typically be 16 - 24 hours depending upon the paint selected for use.) Please confirm if it is the intent of the specifications that there be a 16 - 24 hour wait between the removal and re-installation of adjacent fastners?

Bid what is in the contract plans and specifications. Additionally your attention is directed to Contract Addendum No. 3 dated January 12, 1998.

With reference to special provision 10-1.37 "CLEAN AND PAINT STRUCTURAL STEEL"on page 137, 3rd paragraph re: caulking of open seams.... Please clarify the definition of joints "that would retain moisture". Also, please confirm the approximate quantity (l-ft) of joints that you anticipate will have to be caulked.

The phrase "retain moisture" would apply to joints that would remain wet if

subjected to precipitation or moisture in the environment. Caulking is included in the payment for "CLEAN AND PAINT STRUCTURAL STEEL" with no estimated quantity.

Does the surface of existing structural members covered by new reinforcing plates require the Dry Spot Blast and Undercoat?

Yes

Does the surface of existing gusset plates covered by new splice plates require the Dry Spot and Blast Undercoat?

Yes

Does the surface under the heads of bolts at the underside of connections require the Dry Spot and Blast and Undercoat?

Yes

May alternative methods of joint preparation such as a bonding agent be used in lieu of roughening the concrete?

Bid what is specified in the contract. The requirements of Section 51-1.13 "Bonding" of the Standard Specifications apply. Additionally your attention is directed to Contract Addendum No. 1 dated December 23, 1997. Alternative construction methods would be reviewed after award of the contract. There is no guarantee of approval.

With reference to Spec. Provisions section 10-1-25 [curing] please specify which formed surfaces are considered to be "exposed"! Is the "form in place curing method" applicable to all interior formed surfaces or only to the exterior formed surfaces?

"Exposed" refers to all external walls that are visible after the retrofit is complete. Bid it as you see it. Refer to section 90-7.03 "Curing Structures" of the Standard Specifications.

With reference to drawing #140 of 190 sheets, confirm that during construction of the cofferdam and the construction of the footing of Pier #3, the outer railroad track of the existing SPRR will not be used. If SPRR track must remain in service specify how cofferdam can be built.

Your attention is directed to Section 13 "RAILROAD RELATIONS AND INSURANCE" of the special provisions.

Section 10-1.21 "PILING" on page 98, monitoring system: The monitoring system shall be a down the hole system consisting of either ultrasonic, or magnetic, or horizontal drilling. Please supply us with name of subcontractor or supplier of the equipment.

There are Non Destructive Testing and Directional Drilling Contractors available through the Internet. Also see list from previous inquiry listed above

On contract plan Sheet 116 of 190, note #7, existing concrete to be roughened to 1/4" amplitude does this mean: a. 1/4" grooves into the concrete surface b. 1/2" grooves into the concrete surface

Your attention is directed to Contract Addendum No. 1 dated December 23, 1997.

In addition to our earlier questions: special provision section 10-1.01 paragraph 15 requires bonding of dowels in the pier walls during the same

shift the drilling occurs. This requirement will not allow the pre-tying and placement of new wall steel in mats. But rather piece by piece in the air with these huge #14 bars. Is this really your intent?

The intent is to avoid "drilled holes" left open for an extended amount of time. Bid what is in the contract plans and specifications. Alternative construction methods are subject to approval of the Engineer after the bid opening.

Reference Specification 10-1.01"ORDER OF WORK; Can interior pier wall concrete work be completed before foundation retrofit is complete, where the vertical embedded #14 rebars for the new exterior pier walls would block off access to the interior pier wall access openings?

See contract Addendum No. 2 dated January 9, 1998.

Section G-G Sheet 135 shows an existing interior wall in the lower right portion of the detail. This is the only place the wall is shown. Please provide detail of the entire limits & locations of this wall.

Your attention is directed to Contract plan sheet 131 of 190 which shows the existing 12 inch +/- wall thickness. Additional details are available from the as-built drawings.

MORE RECENT INQUIRIES

- * TOSCO ACCESS ROAD
- * FOR CONTRACT ADDENDUM [CLICK HERE](#)
- * CALTRANS OFFICE ENGINEER: Contract Advertisements, Special Provisions, Plan holders, Contract Awards, etc.
- * CALTRANS CONSTRUCTION PROGRAM: Statement of Going Contracts, Equipment Rental Rates, Quality Control/Quality Assurance, Working Days Calendar, etc.
- * U.S. COAST GUARD: Boating Safety, Marine Safety and Environmental Protection, Licensing, etc.
- * OFFICE OF OCEAN and EARTH SCIENCES: Tidal Predictions Tables, etc.
- * NATIONAL WEATHER SERVICE SAN FRANCISCO BAY AREA: Hourly Buoy Reports, Winds, Tidal Predictions, etc.
- * WESTERN REGIONAL CLIMATE CENTER; Precipitation Maps, Climate Predictions, etc.

Caltrans Toll Bridge Seismic Retrofit Construction Program always welcome any comments or suggestions.

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