

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
OFFICE ENGINEER, MS 43
1727 30TH STREET
P.O. BOX 168041
SACRAMENTO, CA 95816-8041
FAX (916) 227-6214
TTY 711



Flex your power!
Be energy efficient!

March 18, 2009

03-Sie-49-16.7
03-3M5004

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SIERRA COUNTY IN DOWNIEVILLE AT DOWNIE RIVER BRIDGE.

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 Tuesday, April 7, 2009.

This addendum is being issued to revise the Notice to Bidders and Special Provisions.

In the Special Provisions, Section 10-1.035, "SCAFFOLDING," is added as attached.

In the Special Provisions, Section 10-1.15, "CLEAN AND PAINT EXISTING STRUCTURAL STEEL," is revised as attached.

To Bid book holders:

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid 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.

Addendum No. 1
Page 2
March 18, 2009

03-Sie-49-16.7
03-3M5004

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it. A copy of this addendum is available for the Contractors' use on the Web site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

If you are not a Bid 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

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Division of Engineering Services - Office Engineer

Attachments

10-1.035 SCAFFOLDING

Scaffolding shall be defined in accordance with and shall conform to the Construction Safety Orders of the Division of Occupational Safety and Health and these special provisions.

If scaffolding is constructed for this project over or adjacent to traffic, or suspended from the traveled way, the Contractor shall submit to the Engineer working drawings for scaffolding systems in conformance with Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, and these special provisions.

Scaffolding working drawings shall include the following:

- A. Descriptions, calculations, and values for all loads anticipated during the erection, use, and removal of scaffolding.
- B. Methods and equipment for erecting, moving, and removing scaffolding.
- C. Design details including bolt layouts, welding details, and any connections to existing structures.
- D. Stress sheets including a summary of computed stresses in the (1) scaffolding, (2) connections between scaffolding and any existing structures, and (3) existing load supporting members. The computed stresses shall include the effects of erection, movement, and removal of the scaffolding.

If manufactured scaffolding is used, the manufacturer's name, address, and phone number shall be shown on the working drawings.

The working drawings shall be stamped and signed by an engineer who is registered as a Civil Engineer. In addition, prior to submitting the working drawings to the Engineer, the working drawings shall be stamped and signed by an independent reviewer who is registered as a Civil Engineer in the State of California. The independent reviewer shall not be employed by the same entity preparing the working drawings.

The Contractor shall allow 7 days for the review of a complete submittal for scaffolding working drawings. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Welding for the manufacturing and erection of scaffolding shall conform to the requirements in AWS D1.1 or AWS D1.2 for steel or aluminum construction respectively.

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

10-1.15 CLEAN AND PAINT EXISTING STRUCTURAL STEEL

Metal surfaces of the existing structure shall be cleaned and painted in conformance with the provisions in Section 59-2, "Painting Structural Steel," Section 59-3, "Painting Galvanized Surfaces," and Section 91, "Paint," of the Standard Specifications and these special provisions.

The existing paint systems consist of materials listed in "Existing Highway Facilities" of these special provisions.

For removing paint from structural steel, certification in conformance with the "Category A" requirements in the Qualification Procedure No. 2, "Standard Procedure for the Qualification of Painting Contractors (Field Removal of Hazardous Coatings from Complex Structures)" (SSPC-QP 2, Category A) shall be required.

Prior to performing any painting or paint removal, the Contractor shall submit to the Engineer, in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate Painting Quality Work Plan (PQWP) for each item of work for which painting or paint removal is to be performed. As a minimum, each PQWP shall include the following:

- A. The name of each Contractor or subcontractor to be used.
- B. One copy each of all current ASTM and "SSPC: The Society for Protective Coatings" specifications or qualification procedures applicable to the painting or paint removal to be performed. These documents shall become the permanent property of the Department.
- C. A copy of the coating manufacturer's guidelines and recommendations for surface preparation, painting, drying, and curing of painted structural steel, including testing methods and maximum allowable levels for soluble salts.
- D. Proposed methods and equipment to be used for all cleaning, surface preparation and painting operations.
- E. Proof of required certifications SSPC-QP 1 and SSPC-QP 2.
- F. Proposed methods to control environmental conditions in accordance with the manufacturer's recommendations and these special provisions.
- G. Proposed methods to protect the coating during the curing period.
- H. Proposed rinse water collection plan.
- I. A detailed paint repair plan for the repair of damaged areas.
- J. Procedures for containing blast media and water during application of coatings and coating repair of erected steel.
- K. Examples of proposed daily reports for all testing to be performed, including type of testing, location, lot size, time, weather conditions, test personnel, and results.

Prior to submitting the PQWP, a prepainting meeting between the Engineer, the Contractor, and a representative from each entity performing painting for this project shall be held to discuss the requirements for the PQWP.

The Engineer shall have 3 weeks to review the PQWP submittal after a complete plan has been received. No painting or paint removal shall be performed until the PQWP for that work is approved 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 PQWP, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

It is understood that the Engineer's approval of the Contractor's PQWP 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 Contractor shall provide enclosures to permit cleaning and painting during inclement weather. Provisions shall be made to control atmospheric conditions inside the enclosures within specified limits during cleaning and painting operations, until the film meets a dry-through condition as described in section 7.7 of ASTM D1640, and throughout the curing period in accordance with the manufacturer's recommendations and these special provisions. Full compensation for providing and maintaining such enclosures shall be considered as included in the prices paid for the various contract items of work requiring paint and no additional compensation will be allowed therefor.

Fresh, potable water with a maximum chloride content of 75 ppm and a maximum sulfate content of 200 ppm shall be used for water rinsing or pressure washing operations. No continuous recycling of rinse water will be permitted. If rinse water is collected into a tank and subsequent testing determines the collected water conforms to the specified requirements, reuse may be permitted by the Engineer if no collected water is added to the tank after sample collection for determination of conformance to specified requirements.

CLEANING

Metal surfaces shall be blast cleaned in conformance with the provisions in Section 59-2.03, "Blast Cleaning," of the Standard Specifications. Blast cleaning shall not be performed until the surfaces are thoroughly dry.

Mineral and slag abrasives used for blast cleaning steel surfaces shall conform to the requirements for Class A, Grade 2 to 3 abrasives contained in SSPC-AB 1, "Mineral and Slag Abrasives," of the "SSPC: The Society for Protective Coatings," and shall not contain hazardous material.

Steel abrasives used for blast cleaning steel surfaces shall comply with the requirements of SSPC-AB 3, "Ferrous Metal Abrasive," of the "SSPC: The Society for Protective Coatings." If steel abrasive is recycled through shop or field abrasive blast cleaning units, the recycled abrasive shall conform to the requirements of SSPC-AB 2, "Specification for Cleanliness of Recycled Ferrous Metallic Abrasive," of the "SSPC: The Society for Protective Coatings."

A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications and a Material Safety Data Sheet shall be furnished prior to use for each shipment of blast cleaning material for cleaning existing steel.

Abrasive blast cleaned surfaces shall be tested by the Contractor for soluble salts using a Class A or B retrieval method as described in Technology Guide 15, "Field Methods for Retrieval and Analysis of Soluble Salts on Steel and Other Nonporous Substrates," of the "SSPC: The Society for Protective Coatings," and cleaned so the maximum level of soluble salts does not exceed the lesser of the coating manufacturer's written recommendations or 10 micrograms per square centimeter. Areas of abrasive blast cleaned steel shall be tested at the rate of 3 tests for the first 1,000 square feet prepared per day, and one test for each additional 1,000 square feet or portion thereof, at locations selected by the Engineer. When less than 1,000 square feet of surface area is prepared in a shift, at least 2 tests shall be performed. If levels of soluble salts exceed the maximum allowed by these special provisions, the entire area represented by the testing will be rejected. The Contractor shall perform additional cleaning and testing of rejected areas until soluble salt levels conform to these requirements.

PAINTING

The paints to be applied to the existing metal surfaces, the minimum number of coats, and the total dry film thickness shall conform to the following:

Blast cleaned areas shall be coated with the following 3-coat, moisture-cured polyurethane coating system in the order listed. All coats of the coating system shall be manufactured by the same manufacturer.

1. First undercoat paint shall be a single component, zinc-rich, moisture-cured polyurethane coating conforming to the following requirements:

Property	Value	ASTM Designation
Metallic Zinc in dry film	78% min.	D 521
Weight per Liter	340 g/L.	D 1475
Nonvolatile Content	88% min.	D 2369
VOC Content	0.3 kg/L max.	D 3960
Dry Times		D 1640
Set to Touch	30 minutes max.	
Dry Hard	6 hours max.	

The first undercoat shall be applied to a dry film thickness of not less than 3 mils nor more than 4 mils within 4 hours of abrasive blast cleaning.

- Second undercoat paint shall be a single component, micaceous iron oxide filled, moisture-cured polyurethane coating conforming to the following requirements:

Property	Value	ASTM Designation
Weight per	250 g/L	D 1475
Nonvolatile Content	80% min.	D 2369
VOC Content	0.3 kg/L max.	D 3960
Dry Times		D 1640
Set to Touch	1 hour max.	
Dry Hard	8 hours max.	

The second undercoat shall be applied to a dry film thickness of not less than 3 mils nor more than 4 mils. A minimum of 20 hours and a maximum of 7 days shall elapse between application of the first and second undercoats. The surface of the first undercoat shall be pressure washed as directed in these specifications if more than 48 hours elapse between application of the first and second undercoat.

- Finish coat shall be a single component, semi-gloss, aliphatic, moisture-cured polyurethane coating conforming to the following requirements:

Property	Value	ASTM Designation
Weight per Liter	250 g/L	D 1475
Nonvolatile Content	72% min.	D 2369
VOC Content	0.3 kg/L max.	D 3960
Dry Times		D 1640
Set to Touch	2 hours max.	
Dry Hard	16 hours max.	

Finish coat color shall match Federal 595B No. 14090 10076 except that the 60 degree gloss shall range from 40 to 55 when measured according to ASTM designation D 523.

The finish coat shall be applied to a dry film thickness of not less than 2 mils nor more than 3 mils. A minimum of 20 hours and a maximum of 7 days shall elapse between application of the second undercoat and the finish coat. The surface of the undercoat shall be pressure washed as directed in these specifications if more than 48 hours elapse between application of the second undercoat and the finish coat.

The following environmental conditions shall apply to application of moisture-cured polyurethane coatings:

Environmental Parameter	Requirement
Application Relative Humidity	35 to 85%
Substrate & Ambient Temperature	5° F above the dew point
Air and Substrate Temperature for Application and Curing (Film is curing until it has reached a dry hard condition as defined in ASTM D 1640)	39 to 100° F

The Contractor shall be aware that moisture cured polyurethane coatings can entrap bubbles generated during curing within the film when applied at excessive film thicknesses. Any such bubbling is unacceptable and shall be cause for rejection. Such damaged film shall be either removed and replaced or repaired to the satisfaction of the Engineer at his discretion.

Thinning will be permitted in accordance with manufacturer's recommendations to facilitate paint application.

The overall dry film thickness of the painting system shall be not less than 8 mils nor more than 11 mils.

PAYMENT

Clean and paint structural steel (existing bridge) will be paid for on the basis of a lump sum price.

The contract lump sum price paid for clean and paint structural steel (existing bridge) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in blast cleaning and painting surfaces of existing metal, including testing for soluble salts, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.