

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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February 14, 2014

04-CC,Mrn-580-6.3/7.7,0.0/2.5

04-3G4844

Project ID 0412000084

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN CONTRA COSTA AND MARIN COUNTIES IN RICHMOND AND SAN RAFAEL AT THE RICHMOND/SAN RAFAEL 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 Wednesday, March 19, 2014.

This addendum is being issued to revise the project plans, the *Notice to Bidders and Special Provisions*, and the *Bid* book.

Project plan sheets 1, 7, 8, and 9 are replaced and attached for substitution for the like-numbered sheets.

Project plan sheets 1A and 9A are added and attached for addition to the project plans.

In the *Notice to Bidders and Special Provisions*, in the Registered Persons signature and seal sheet, the signature and seal sheet is replaced as attached:

In the *Notice to Bidders*, the twelfth paragraph is replaced as follows:

"A mandatory prebid meeting and site review is scheduled for this project at 10:30 am, on February 20, 2014, at the Caltrans Construction Office, 3401 Regatta Blvd., Richmond, CA 94804."

In the *Special Provisions*, Section 2-1.03, "MANDATORY PREBID MEETING AND SITE REVIEW," is replaced as attached.

In the *Special Provisions*, Section 5-1.20A, is replaced as attached.

In the *Special Provisions*, Section 7, "LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC," Section 7-1.02K(6)(e), "SCAFFOLDING," is replaced as attached.

In the *Special Provisions*, Section 12-4.02A, the sixth paragraph is replaced as follows:

"Freeway closure charts are for the erection and removal of temporary scaffolding and containment system and other authorized work."

In the *Special Provisions*, Section 12-4.03C, the second item of first paragraph is deleted.

In the *Special Provisions*, Section 12-4.05B, EB Charts, are replaced as attached.

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In the Special Provisions, Section 14, "ENVIRONMENTAL STEWARDSHIP," Section 14-6.02, "SPECIES PROTECTION," is added as attached.

In the Special Provisions, Section 14, "ENVIRONMENTAL STEWARDSHIP," Section 14-6.03A, is added as attached.

In the Special Provisions, Section 14, "ENVIRONMENTAL STEWARDSHIP," Section 14-8.02A, is added as attached.

In the Special Provisions, DIVISION VI "STRUCTURES," Section 59, "PAINTING," is replaced as attached.

In the *Bid* book, in the "Bid Item List," Items 8 and 9 are revised and Item 2 is deleted as attached.

To *Bid* book holders:

In the *Bid* book, page 3 of the "Bid Item List" is replaced as attached. The attached Bid Item List is to be used in the bid.

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.

This addendum and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-3G4844

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,



MOHSEN SULTAN
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

CONTRACT NO. 04-3G4841

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

STRUCTURES



REGISTERED CIVIL ENGINEER



Replace section 2-1.03 with:

2-1.03 MANDATORY PREBID MEETING AND SITE REVIEW

The Department will conduct a mandatory prebid meeting and site review for this contract. The purpose of the prebid meeting is to provide a technical overview of the work. The site review will provide prospective bidders with their only access to the work site before to bidding and allow the prospective bidders to carefully examine the existing structure and site conditions. Each bidder must attend the mandatory prebid meeting and site review. The bidder's representative must be a company officer, project superintendent, or project estimator. For a joint venture, one of the parties must attend the mandatory prebid meeting and site review. The Department does not accept a bid from a bidder who did not attend the meeting and site review.

A sign-up sheet is used to identify each prospective bidder. Each bidder is required to include the name and title of the company representative attending the mandatory prebid meeting and site review.

The Department provides transportation and access to the site review. The bidder's representatives must provide their own safety gear including appropriate footwear, hardhats, eye protection, gloves and U.S. Coast Guard approved life jacket. The site review will immediately follow the prebid meeting, however it is anticipated a maximum of two representatives from each bidder will be able to participate in the site visit.

Add to section 5-1.20A:

During the progress of the work under this Contract, work under the following contracts may be in progress at or near the job site of this Contract:

Coincident or Adjacent Contracts

Contract no.	County–Route–Post Mile	Location	Type of work
04-1A3204	CC-580-5.5/6.1	Richmond/I-580	Road and Bridge work
To Be Determined	CC-580-6.3/7.7 to Mrn-580-0.0/2.5	Richmond/San Rafael Bridge	Restriping

Replace section 7-1.02K(6)(e) with:

7-1.02K(6)(e) Scaffolding

7-1.02K(6)(e)(i) General

Section 7-1.02K(6)(e) applies to scaffolding constructed on or suspended from a bridge.

Scaffolding loads must include loads imposed by:

1. Containment system under section 59-2.03B(3)
2. Debris containment and collection plan under section 14-11.08B(2)
3. Species protection measures under section 14

The scaffolding and the ventilated containment systems must be designed, constructed and maintained to divert rain water run-off, through the existing upper and lower deck open-curb drains and through the lower deck open expansion joints, away from the ventilated containment systems. The existing deck drainage features and conditions must not be altered.

7-1.02K(6)(e)(ii) Definitions

Scaffold Dead Load (SDL): Weight from any elements of the scaffolding, the ventilated containment system and the species protection measures that are required for performing the work.

Scaffold Live Load (SLL): Weight from any materials, equipment, tools, and personnel that are required to be present on the scaffold for performing the work.

Additional Deck Load (ADL): Loads on the bridge deck due to construction activities, including temporary railing (type K), parked construction vehicles, equipment, and containers.

Scaffold Wind Load: Loads imposed on the bridge by the scaffolding and ventilated containment systems due to wind pressure they resist. It is horizontal load acting in transverse direction of the bridge.

7-1.02K(6)(e)(iii) Submittals

Submit 6 copies of shop drawings and 1 copy of calculations.

The shop drawings and calculations must be sealed and signed by:

1. Engineer who is registered as a civil engineer in the State.
2. Independent reviewer who is:
 - 2.1. Registered as a civil engineer in the State
 - 2.2. Not employed by the same entity that prepared the drawings

Include in the submittal:

1. Descriptions, calculations, and values for loads anticipated during erection, use, and removal of the scaffolding.
2. Methods and equipment for erecting, moving, and removing scaffolding.
3. Design details, including bolt layouts, welding details, and connections to existing structures.
4. Stress sheets, including a summary of computed stresses in the scaffolding and in the connections between the scaffolding and existing structures. The computed stresses must include the effects of erection, movement, and removal of the scaffolding.
5. A maintenance and inspection plan, including an action plan for forecasted wind events of sustained wind speed of 35 mph and greater. The action plan must (1) ensure safety and stability of the scaffolding, containment and species protection systems, and the material and equipment that are stored on the system, (2) ensure compliance with other applicable environmental regulations, and (3) establish method(s) of relieving the wind pressure on the ventilated containment system when the forecast wind speed reaches 50 mph. Historical wind data can be obtained at the NOAA web site.

If manufactured scaffolding is used, the manufacturer's name, address, and telephone number must be shown on the shop drawings.

Allow 30 days for the Department's review.

Welding must comply with AWS D1.1 for steel and AWS D1.2 for aluminum.

The licensed engineer signing the scaffolding drawings must certify that the scaffolding is constructed as shown in the authorized shop drawings before work involving the scaffolding is performed. The certification must include any necessary testing to verify the ability of the scaffolding members to sustain the stresses required by the scaffolding design. The licensed engineer may designate a representative to perform this certification as follows:

1. Where scaffolding contains openings for vehicular traffic or pedestrians, the designated representative must (1) have at least 3 years of combined experience in falsework design, scaffolding design, or supervising falsework construction and (2) be registered as a civil engineer in the State
2. For other scaffolding, the designated representative must have at least 3 years of combined experience in falsework design, scaffolding design, or supervising falsework construction
3. The Engineer may request you certify the experience of the designated representative and provide supporting documentation demonstrating the required experience

7-1.02K(6)(e)(iv) Bridge Scaffolding

Section 7-1.02K(6)(e)(iv) applies to scaffolding constructed on or suspended from a bridge.

The available bridge load capacity in excess of the dead and live load demand is shown in the following table. The available capacity is a uniform load across the entire bridge width and is based on the design live load shown.

Bridge number	Available load capacity (lb/sq ft) gradation ^a	Bridge width (ft)	Design live load
28-0100	33	42	HS20-44

^aWhen a bridge span is loaded with SLL then ADL is not allowed in the same span, except for temporary railing (type K).

Calculations must include:

1. Moment and shear force demands versus capacity during erection, movement, and removal of the scaffolding on the longitudinal girders of girder bridges and the flooring system of stringers and floor beams of truss bridges.
2. Tension and compression force demands versus capacity of truss members of truss bridges during erection, movement, and removal of the scaffolding.

Scaffolding loads must not exceed the load-carrying capacity of the existing members. Determine the capacity of existing members under the Department's *Bridge Design Specifications, Load Factor Design Version, April 2000*. Use the group load factors shown in the following table:

Group	Gamma factor	Beta factors	
		D	(L+I)H
I _H ^a	1.3	1	1

^aH denotes HS-20 loads

For truss-type bridges, all connections must be made through stringers, floor beams, or truss panel points, and no connections are allowed that may cause bending stresses in a truss member.

Replace "Reserved" in section 12-4.05B with:

Chart no. MRN580E1 Freeway/Expressway Lane Requirements																										
County: MRN / CC							Route/Direction: 580 / EB							PM: MRN R0.00 / R2.50 CC R6.30 / R7.70												
Closure limits: Richmond-/ San Rafael Bridge																										
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Mon-Thu	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1	1		
Fri	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1		
Sat	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1		
Sun	1	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1		

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

S Shoulder closure allowed (right)

REMARKS:

- Contractor may close the shoulder while left lane on the bridge is closed.
- Use this chart when eastbound Route 580 is striped as two mainline lanes and right side shoulder.
- Use this chart from the start of job activities to August 31, 2016.

**Chart no. MRN580E2
Freeway/Expressway Lane Requirements**

County: MRN / CC	Route/Direction: 580 / EB	PM: MRN R0.00 / R2.50 CC R6.30 / R7.70
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Closure limits: Richmond-/ San Rafael Bridge

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1	1	2	2	2	2	2	2	2	2							2	1	1	1	1
Fri	1	1	1	1	1	1	2	2	2	2	2	2	2	2							2	2	1	1	1
Sat	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2						2	2	2	1	1
Sun	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2					2	2	2	1	1	1

Legend:

- 1 Provide at least 1 through freeway lane open in direction of travel
- 2 Provide at least 2 adjacent through freeway lanes open in direction of travel
- Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

- Use this chart when eastbound Route 580 is striped as three mainline lanes and no right side shoulder.
- Use this chart from September 1, 2016 to the end of job activities.

Replace section 14-6.02 with:

14-6.02 SPECIES PROTECTION

14-6.02A General

Section 14-6.02 includes specifications for protecting regulated species or their habitat.

This project is within or near habitat for regulated species shown in the following table:

Species Name
Seals (<i>pinnipeds</i>)

14-6.02B Material

Not Used

14-6.02C Construction

14-6.02C(1) General

Not Used

14-6.02C(2) Protective Radius

Upon discovery of a regulated species, stop construction activities within a 100 ft radius of the discovery or as defined in the table below. Immediately notify the Engineer. Do not resume activities until receiving notification from the Engineer.

Regulated species name	Protective radius
Seals (<i>pinnipeds</i>)	100 feet

14-6.02C(3) Protocols

Not Used.

14-6.02C(4) Biological Resource Information

Not Used.

14-6.02C(5) Protection Measures

Within the job limits, implement the following protection measures:

1. No construction activity is allowed from Pier 53 to Pier 57 from March 1 to July 31.
2. Do not place or remove temporary scaffolding from February 15 to September 15.
3. Do not place or remove temporary scaffolding from Pier 53 to Pier 57:
 - 3.1. From 2.5 hours before low tide to low tide
 - 3.2. From low tide to 2.5 hours after low tide.
4. Use tools, including dead blow hammers, from Pier 53 to Pier 57 to minimize peak sound pressure levels.
5. Do not allow the sand blasting hopper to run empty, resulting in excess sound pressure levels.
6. For any birds, comply with CA Code of Regs § 3503, 3503.5, 3511 and 3513

14-6.02C(6) Monitoring Schedule

Not Used.

14-6.02D Payment

Not Used

Replace the 3rd paragraph of section 14-6.03A with:

The Department anticipates nesting or attempted nesting by migratory and nongame birds from February 15 to September 15.

Replace item 1 in the list in the 7th paragraph of section 14-6.03A with:

1. Stop all work within a 100-foot radius of the discovery except as shown in the following table:

Radius Exceptions

Species	Work stoppage radius (feet)
Peregrine Falcon (<i>Falco peregrines</i>)	300 feet
Cormorant (<i>Phalacrocoracidae</i>)	100 feet

Replace the 2nd paragraph of section 14-8.02A with:

Do not exceed 115 dBA LMax at 5 feet from the job site activities.

Add to section 14-8.02A:

Provide one Type 1 sound level meter and 1 acoustic calibrator to be used by the Department until Contract acceptance. Provide training by a person trained in noise monitoring to 1 Department employee designated by the Engineer. The sound level meter must be calibrated and certified by the manufacturer or other independent acoustical laboratory before delivery to the Department. Provide annual recalibration by the manufacturer or other independent acoustical laboratory. The sound level meter must be capable of taking measurements using the A-weighting network and the slow response settings. The measurement microphone must be fitted with a windscreen. The Department returns the equipment to you at Contract acceptance. Work specified in this paragraph is paid for as noise monitoring.

59 PAINTING

Add to section 59-1.01C:

Within 30 days of Contract approval, submit a schedule of values under section 9-1.16B for each of the following items:

1. Clean structural steel (existing bridge)
2. Paint structural steel (existing bridge)

Values must cover all the work involved in the lump sum item and include:

1. Scaffolding
2. Containment
3. Disposal
4. Species protection measures
5. Indirect costs

Include descriptions of work included in each value and your quantities for each value.

Add to section 59-1.03B:

Do not apply moisture-cured polyurethane coating when the atmospheric or surface temperature is less than 5 degrees F above the dew point or when the relative humidity is less than 35 percent or more than 85 percent. The atmospheric and surface temperatures must remain from 36 to 100 degrees F during application and curing time until the film is considered dry-hard under ASTM D 1640.

Add to section 59-2.01A:

Clean and paint the structures shown in the following table with the coating system specified:

Bridge name and number	Work description	Coating system
Richmond - San Rafael Bridge No. 28-0100	Clean (includes removal of rust, abandoned nests, accumulated debris, animal droppings (up to 2 feet thick in some locations)), spot blast clean, and paint portions of the existing bridge, as shown.	Moisture-cured polyurethane

Replace "Reserved" in section 59-2.01C(2) with:

Submit proof of each required SSPC-QP certification as specified in section 8-1.04C. Required certifications are as follows:

1. SSPC-QP 1
2. SSPC-QP 2, Category A

Add to section 59-2.03B(3)(a) of the RSS for section 59-2.03B:

The containment system must provide a vertical clearance of 15 feet and a horizontal clearance of 32 feet for the passage of public traffic.

Replace the 2nd paragraph of the RSS for section 59-2.03B(3)(a) with:

The containment system must be a ventilated containment system.

Replace the 4th and 5th paragraphs of the RSS for section 59-2.03B(3)(b)(ii) with:

The minimum total design load for the ventilated containment system must consist of the sum of the dead and live vertical loads and wind loads.

Dead, live, and wind loads are as follows:

1. Dead load must consist of the actual load of the ventilated containment system
2. Live loads for bridges with only spot blast cleaning work must consist of:
 - 2.1. Uniform load of at least 25 psf applied over the supported area
 - 2.2. Moving concentrated load of 1000 lb to produce maximum stress in the main supporting elements of the ventilated containment system
3. Live loads for bridges with 100 percent blast cleaning to bare metal must consist of:
 - 3.1. Uniform load of at least 45 psf, which includes 20 psf of sand load, applied over the supported area
 - 3.2. Moving concentrated load of 1000 lb to produce maximum stress in the main supporting elements of the ventilated containment system
4. Uniform wind velocity pressure of 10 psf applied across the ventilated containment and species protection systems

Replace "Reserved" in section 59-2.03C(3) of the RSS for section 59-2.03C with:

59-2.03C(3)(a) General

Moisture-cured polyurethane coating systems must consist of 2 undercoats and a finish coat. Undercoats and finish coat must be from the same manufacturer.

Spot blast cleaned areas are to receive the 1st undercoat, 2nd undercoat and the finish coat.

Areas that are not spot blast cleaned are to receive 2 coats of the 2nd undercoat, and one coat of the finish coat.

Moisture-cured polyurethane coating systems must comply with the requirements shown in the following table:

Moisture-Cured Polyurethane Coating System

Description	Coating	Dry film thickness (mils)
1st undercoat	Single-component, zinc-rich moisture-cured polyurethane	3-4
2nd undercoat	Single-component, micaceous iron oxide-filled moisture-cured polyurethane	3-4
Finish coat	Single-component, semi-gloss, aliphatic, moisture-cured polyurethane	2-3
Total thickness, all coats		8-11

You may thin moisture-cured polyurethane under the manufacturer's instructions.

Moisture-cured polyurethane may entrap bubbles within the coating film when applied at excessive film thicknesses. Repair or remove and replace coating that exhibits bubbling.

59-2.03C(3)(b) Undercoats

Apply the 1st undercoat on the same day blast cleaning is performed.

Apply the 2nd undercoat at least 20 hours and at most 7 days after applying the 1st undercoat. If more than 48 hours elapse between applications, pressure rinse the surface of the 1st undercoat before applying the 2nd undercoat.

59-2.03C(3)(c) Finish Coat

Apply the finish coat at least 20 hours and at most 7 days after applying the 2nd undercoat. If more than 48 hours elapse between applications, pressure rinse the surface of the 2nd undercoat before applying the finish coat.

The finish coat must match color no. 17178 of FED-STD-595.

BID ITEM LIST
04-3G4844

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070030	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
2	BLANK					
3	080050	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
4	090100	TIME-RELATED OVERHEAD (WDAY)	WDAY	712		
5	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
6	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
7	128652	PORTABLE CHANGEABLE MESSAGE SIGN (LS)	LS	LUMP SUM	LUMP SUM	
8	129000	TEMPORARY RAILING (TYPE K)	LF	12,000		
9	129100	TEMPORARY CRASH CUSHION MODULE	EA	46		
10	130100	JOB SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
11	130200	PREPARE WATER POLLUTION CONTROL PROGRAM	LS	LUMP SUM	LUMP SUM	
12	141110	WORK AREA MONITORING (BRIDGE)	LS	LUMP SUM	LUMP SUM	
13	590106	CLEAN STRUCTURAL STEEL (EXISTING BRIDGE)	LS	LUMP SUM	LUMP SUM	
14	590111	PAINT STRUCTURAL STEEL (EXISTING BRIDGE)	LS	LUMP SUM	LUMP SUM	
15	590135	SPOT BLAST CLEAN AND PAINT UNDERCOAT	SQFT	280,000		
16	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID:

\$
