

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

1727 30th Street MS-43

P.O. BOX 168041

SACRAMENTO, CA 95816-8041

FAX (916) 227-6214

www.dot.ca.gov/hq/esc/oe



*Serious Drought.
Help save water!*

May 27, 2016

04-SCI-152-11.9
04-0G7204
Project ID 0400001989
ACHSNHP-P152(087)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SANTA CLARA COUNTY AT FRAZIER LAKE ROAD INTERSECTION to revise the project plans, the *Notice to Bidders and Special Provisions*, the Bid Book and *Information Handout*.

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, June 7, 2016.

Project plan sheets 57A, 80A, 80B, 80C, and 80D are added and attached for addition to the project plans.

In the *Notice to Bidders and Special Provisions*, in the "STANDARD PLANS LIST," the following Standard Plans are added as follows:

"RSP A24F, RSP ES-3I, RSP ES-3J, RSP ES-3K, RSP ES-3L, ES-6B, and ES-7O"

In the Special Provisions, Section 2-1.06B is replaced as attached.

In the Special Provisions, Section 8-1.04C the following paragraph is added after the third paragraph.

"You may enter the job site only to measure controlling field dimensions and locate utilities."

In the Special Provisions, Section 12-4.05H is replaced as attached.

In the Special Provisions, Section 14-1.02A is replaced as attached.

In the Special Provisions, Section 49-3.02B (6)(c) is replaced as attached.

In the Special Provisions, Section 83-1.02B(1) is added as attached.

The *Information Handout* is replaced as attached.

Addendum No. 2
Page 2
May 27, 2016

04-SCI-152-11.9
04-0G7204
Project ID 0400001989
ACHSNHP-P152(087)E

In the *Bid* book, in the "Bid Item List," Item 56 is replaced.

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*.

Submit the *Bid* book as described in the *Electronic Bidding Guide* at the Bidders' Exchange website.

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

Inform subcontractors and suppliers as necessary.

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

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-0G7204

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,



BIJAN SARTIPI
District Director

Attachments

Add between the 1st and 2nd paragraphs of section 2-1.06B:

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Included in the <i>Information Handout</i>	Letter of Concurrence from USFWS(08ESMF00-2014-I-0366-1)
Available as specified in the <i>Standard Specifications</i>	Cross sections
Included with the project plans	Logs of Test Borings

Replace section 12-4.05H with:

12-4.05H City Street Closures

Chart no. 2 Complete City Street Closure Hours/																									
Location: Frazier Lake Road										Direction: NB/SB															
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	C	C	C	C	C	C																C	C	C	C
Fri	C	C	C	C	C	C																		C	C
Sat	C	C	C	C	C	C	C																	C	C
Sun	C	C	C	C	C	C	C	C	C																C
Legend:																									
<input type="checkbox"/> C Street may be closed <input type="checkbox"/> No work allowed																									
REMARKS:																									

Add to the end of section 14-1.02A:

More than one ESA exists on the job site. Use the management measures for the corresponding ESA shown in the following table:

ESA Management		
Identification	Location	Management measures
ESA	Shown on plans	Before starting job site activities, protect the ESA by installing a Temporary Fence (Type Frog) and ESA signs with message in black letter: DO NOT ENTER.
Critical Root Zone	45-foot and 50-foot radii around the walnut and oak trees, respectively at approximate station 130+00 and 130+75, adjacent to the eastbound shoulder.	No access is authorized in the critical root zone area beyond the Temporary Fence (Type Frog) fence as shown in the plans.

ESA signs must:

1. Be weatherproof and fade-proof
2. Be from 8-1/2 to 11 inches high and from 11 to 14 inches wide
3. Have a message that is legible from a distance of 20 feet by persons with 20/20 vision or vision corrected to 20/20
4. Be attached to the ESA barrier with tie wire or locking plastic fasteners

The signs may be made of laminated printed paper attached to an inflexible weatherproof backer board.

Access to an ESA other than that described is prohibited.

Add to section 49-3.02B(6)(c):

The synthetic slurry must be one of the materials shown in the following table:

Material	Manufacturer
SlurryPro CDP	KB INTERNATIONAL LLC 735 BOARD ST STE 209 CHATTANOOGA TN 37402 (423) 266-6964
Super Mud	PDS CO INC 105 W SHARP ST EL DORADO AR 71731 (870) 863-5707
Shore Pac GCV	CETCO CONSTRUCTION DRILLING PRODUCTS 2870 FORBS AVE HOFFMAN ESTATES IL 60192 (800) 527-9948
Terragel or Novagel Polymer	GEO-TECH SERVICES LLC 220 N. ZAPATA HWY STE 11A-449A LAREDO TX 78043 (210) 259-6386

Use synthetic slurries in compliance with the manufacturer's instructions. Synthetic slurries shown in the above table may not be appropriate for a given job site.

Synthetic slurries must comply with the Department's requirements for synthetic slurries to be included in the above table. The requirements are available from the Offices of Structure Design, P.O. Box 168041, MS# 9-4/11G, Sacramento, CA 95816-8041.

SlurryPro CDP synthetic slurry must comply with the requirements shown in the following table:

SLURRYPRO CDP

Property	Test	Value
Density During drilling	Mud Weight (density), API RP 13B-1, section 4	≤ 67.0 pcf ^a
Before final cleaning and immediately before placing concrete		≤ 64.0 pcf ^a
Viscosity During drilling	Marsh Funnel and Cup. API RP 13B-1, section 6.2	50–120 sec/qt
Before final cleaning and immediately before placing concrete		≤ 70 sec/qt
pH	Glass electrode pH meter or pH paper	6.0–11.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete	Sand, API RP 13B-1, section 9	≤ 0.5 percent

^aIf authorized, you may use slurry in salt water. The allowable density of slurry in salt water may be increased by 2 pcf.

Slurry temperature must be at least 40 degrees F when tested.

Super Mud synthetic slurry must comply with the requirements shown in the following table:

SUPER MUD

Property	Test	Value
Density During drilling	Mud Weight (Density), API RP 13B-1, section 4	≤ 64.0 pcf ^a
Before final cleaning and immediately before placing concrete		≤ 64.0 pcf ^a
Viscosity During drilling	Marsh Funnel and Cup. API RP 13B-1, section 6.2	32–60 sec/qt
Before final cleaning and immediately before placing concrete		≤ 60 sec/qt
pH	Glass electrode pH meter or pH paper	8.0–10.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete	Sand, API RP 13B-1, section 9	≤ 0.5 percent

^aIf authorized, you may use slurry in salt water. The allowable density of slurry in salt water may be increased by 2 pcf.

Slurry temperature must be at least 40 degrees F when tested.

Shore Pac GCV synthetic slurry must comply with the requirements shown in the following table:

SHORE PAC GCV

Property	Test	Value
Density During drilling	Mud Weight (Density), API RP 13B-1, section 4	≤ 64.0 pcf ^a
Before final cleaning and immediately before placing concrete		≤ 64.0 pcf ^a
Viscosity During drilling	Marsh Funnel and Cup. API RP 13B-1, section 6.2	33–74 sec/qt
Before final cleaning and immediately before placing concrete		≤ 57 sec/qt
pH	Glass electrode pH meter or pH paper	8.0–11.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete	Sand, API RP 13B-1, section 9	≤ 0.5 percent

^aIf authorized, you may use slurry in salt water. The allowable density of slurry in salt water may be increased by 2 pcf.

Slurry temperature must be at least 40 degrees F when tested.

Terragel or Novagel Polymer synthetic slurry must comply with the requirements shown in the following table:

TERRAGEL OR NOVAGEL POLYMER		
Property	Test	Value
Density During drilling	Mud Weight (Density), API RP 13B-1, section 4	≤ 67.0 pcf ^a
Before final cleaning and immediately before placing concrete		≤ 64.0 pcf ^a
Viscosity During drilling	Marsh Funnel and Cup. API RP 13B-1, section 6.2	45–104 sec/qt
Before final cleaning and immediately before placing concrete		≤ 104 sec/qt
pH	Glass electrode pH meter or pH paper	6.0–11.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete	Sand, API RP 13B-1, section 9	≤ 0.5 percent

^aIf authorized, you may use slurry in salt water. The allowable density of slurry in salt water may be increased by 2 pcf.

Slurry temperature must be at least 40 degrees F when tested.

Replace "Reserved" in section 83-1.02B(1) with:

83-1.02B(1)(a) General

83-1.02B(1)(a)(i) Summary

Section 83-1.02B(1) includes specifications for constructing vegetation control areas around midwest guardrail system, metal beam guardrail to be reconstructed, and three beam barrier posts using minor concrete.

83-1.02B(1)(a)(ii) Definitions

Not Used

83-1.02B(1)(a)(iii) Submittals

Submit a mix design for the minor concrete to be used. The mix design must show proportions of:

1. Coarse aggregate
2. Fine aggregate
3. Cementitious material
4. Reinforcing fiber
5. Water

Include compressive strength test results with your mix design.

Submit the quantity in pounds of crumb rubber aggregate with your certificate of compliance for crumb rubber aggregate if used.

83-1.02B(1)(a)(iv) Quality Control and Assurance

Not Used

83-1.02B(1)(b) Materials

83-1.02B(1)(b)(i) General

Not Used

83-1.02B(1)(b)(ii) Minor Concrete

Minor concrete must include reinforcing fibers and may include crumb rubber aggregate.

Section 90-2.02B does not apply. Minor concrete must contain at least:

1. 505 pounds of cementitious material per cubic yard if crumb rubber aggregate is used
2. 400 pounds of cementitious material per cubic yard if crumb rubber aggregate is not used

The 3rd paragraph of section 90-2.02C does not apply. Minor concrete must have a maximum aggregate size of 3/8 inch.

All ingredients must be added at the concrete plant before delivery to the job site.

You may use volumetric proportioning under ASTM C 685/C 685M or section 90-3.02B.

Minor concrete must have a 28-day compressive strength from 1,400 to 1,800 psi.

83-1.02B(1)(b)(iii) Crumb Rubber Aggregate

Crumb rubber aggregate must consist of ground or granulated scrap tire rubber from automobile and truck tires. Tire buffings are not allowed. Crumb rubber aggregate must be ground and granulated at ambient temperature.

The gradation of the crumb rubber aggregate must comply with the requirements shown in the following table:

Sieve size	Percentage passing
1/2"	100
3/8"	90-100
1/4"	35-45
No. 4	5-15
No. 8	0-5
No. 16	0

Crumb rubber aggregate must not contain more than 0.01 percent of wire by mass of crumb rubber and must be free of oils and volatile organic compounds.

Commingling of crumb rubber from different sources is not allowed.

The crumb rubber aggregate must be 3.5 ± 0.5 percent by weight of the concrete.

83-1.02B(1)(b)(iv) Reinforcing Fibers

Reinforcing fibers for minor concrete must be:

1. Manufactured specifically for use as concrete reinforcement from one of the following:
 - 1.1. Polypropylene, polyethylene, or a combination of both.
 - 1.2. Copolymer of polypropylene and polyethylene.
2. Blended ratio from 4 to 5.67 parts by weight of macro synthetic fibers to 1 part by weight of micro synthetic fibers. Synthetic fibers must be:
 - 2.1. Nonfibrillated macro fibers with individual fiber lengths less than $2 \pm 1/2$ inch.
 - 2.2. Fibrillated or monofilament micro fibers of various lengths and thicknesses.
3. Supplied in sealed, degradable bags of appropriate size for adding whole bags to concrete batches.
4. From a commercial source.

The reinforcing fiber content of minor concrete must be from 5 to 6 lb/cu yd.

83-1.02B(1)(b)(v) Coloring Agent

If a color for concrete is specified in section 83-1.02B(1)(b)(i), the coloring agent must be integral to the concrete mix and added at the concrete plant.

83-1.02B(1)(b)(vi) Block-Out Material

Use a commercially available expanded polystyrene foam for the block-out material. The expanded polystyrene foam must have a compressive strength of 13 ± 5 psi at 10 percent deformation when tested under ASTM D1621.

You may substitute an alternative material that meets the compressive strength requirements of the expanded polystyrene foam if authorized.

83-1.02B(1)(c) Construction

83-1.02B(1)(c)(i) General

Areas to receive vegetation control must be cleared of vegetation, trash, and debris. Dispose of removed material.

83-1.02B(1)(c)(ii) Earthwork

Excavate areas to receive vegetation control. Where vegetation control abuts the existing surfacing, the edge of the existing surfacing must be on a neat line or must be cut on a neat line to a minimum depth of 2 inches before removing the surfacing. The finished elevation of the excavated area to receive vegetation control must maintain planned flow lines, slope gradients, and contours of the job site.

Grade areas to receive vegetation control to a smooth, uniform surface and compact to a relative compaction of not less than 95 percent.

Dispose of surplus excavated material uniformly along the adjacent roadway except as specified in section 14-11.

83-1.02B(1)(c)(iii) Block Out

If block-out material is supplied in more than 1 piece, tape the pieces together to make a smooth surface on the top and sides.

Ensure block-out material does not move during concrete placement.

83-1.02B(1)(c)(iv) Placing Minor Concrete

Place minor concrete for vegetation control by hand.

Strike off and compact minor concrete with a mechanical or vibratory screed device. Apply a broom finish. Match the finished grade to the adjacent section of vegetation control, pavement, shoulder, or existing grade.

If the curing compound method is used for colored concrete, use curing compound no. 6.

83-1.02B(1)(d) Payment

Not Used

BID ITEM LIST

04-0G7204

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	031124	CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATION)	STA	23		
42	397005	TACK COAT	TON	3		
43	490553	FURNISH STEEL SHEET PILING	SQFT	2,100		
44	490554	DRIVE STEEL SHEET PILE	SQFT	2,100		
45	566011	ROADSIDE SIGN - ONE POST	EA	10		
46	566012	ROADSIDE SIGN - TWO POST	EA	3		
47	031125	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	SQFT	64		
48	031126	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	SQFT	48		
49	031127	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	SQFT	94		
50	031128	RETROREFLECTIVE SHEETING (TYPE XI)	SQFT	210		
51	620140	24" ALTERNATIVE PIPE CULVERT	LF	46		
52	705315	24" ALTERNATIVE FLARED END SECTION	EA	2		
53	730070	DETECTABLE WARNING SURFACE	SQFT	60		
54	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	CY	18		
55	800100	TEMPORARY FENCE	LF	1,320		
56	031129	TEMPORARY FENCE (TYPE FROG)	LF	240		
57	832015	MIDWEST GUARDRAIL SYSTEM (7' WOOD POST)	LF	1,050		
58	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	340		
59	839521	CABLE RAILING	LF	80		
60	839584	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	1		