

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!*

October 29, 2015

04-Ala-580-R4.9/R5.6

04-1SS034

Project ID 0400020869

ACNHPI-580-1(064)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ALAMEDA COUNTY NEAR LIVERMORE FROM 1.1 MILE TO 0.4 MILE EAST OF NORTH FLYNN ROAD OVERCROSSING, to revise the project plans, the *Notice to Bidders and Special Provisions* and the *Bid* book.

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 Thursday, November 5, 2015.

Project plan sheet 30 is replaced and attached for substitution for the like-numbered sheet.

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

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

"ES-9A, ES-9B, ES-9C and ES-9D."

In the *Special Provisions*, Section 86, "ELECTRICAL SYSTEMS," is replaced as attached.

In the *Bid* book, in the "Bid Item List," Item 32 is replaced.

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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

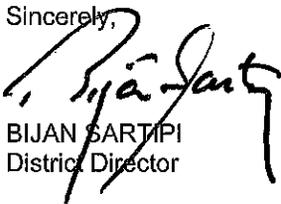
Inform subcontractors and suppliers as necessary.

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/04/04-1SS034

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

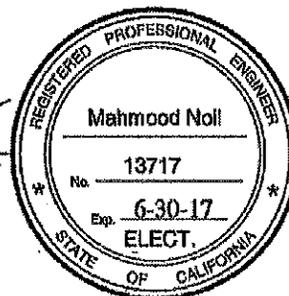
CONTRACT NO. 04-1SS034

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

ELECTRICAL


REGISTERED ELECTRICAL ENGINEER

10/27/2015



Add to the end of the 1st paragraph of the RSS for section 86-1.01:

This work is shown on plan sheets labeled E. The work involved in each bid item is shown on a sheet with a title matching the bid item description except for the following bid items

1. Maintaining the existing traffic management system during construction

Replace "Reserved" in section 86-1.06B with:

Traffic Management System (TMS) elements include, but are not limited to ramp metering (RM) system, communication system, traffic monitoring stations, video image vehicle detection system (VIVDS), microwave vehicle detection system (MVDS), loop detection system, changeable message sign (CMS) system, extinguishable message sign (EMS) system, highway advisory radio (HAR) system, closed circuit television (CCTV) camera system, roadway weather information system (RWIS), visibility sensor, and fiber optic system.

Existing TMS elements, including detection systems, shown and located within the project limits must remain in place and be protected from damage. If the construction activities require existing TMS elements to be nonoperational or off line, and if temporary or portable TMS elements are not shown, the Contractor must provide for temporary or portable TMS elements. The Contractor must receive authorization on the type of temporary or portable TMS elements and installation method.

Before work is performed, the Engineer, the Contractor, and the Department's Traffic Operations Electrical representatives must jointly conduct a pre-construction operational status check of all existing TMS elements and each element's communication status with the Traffic Management Center (TMC), including existing TMS elements not shown and elements that may not be impacted by the Contractor's activities. The Department's Traffic Operations Electrical representatives will certify the TMS elements' location and status, and provide a copy of the certified list of the existing TMS elements within the project limits to the Contractor. The status list will include the operational, defined as having full functionality, and the nonoperational components.

The Contractor must obtain authorization at least 72 hours before interrupting existing TMS elements' communication with the TMC that will result in the elements being nonoperational or off line. The Contractor must notify the Engineer at least 72 hours before starting excavation activities.

Traffic monitoring stations and their associated communication systems, which were verified to be operational during the pre-construction operational status check, must remain operational on freeway/highway mainline at all times, except:

1. For a duration of up to 15 days on any continuous segment of the freeway/highway longer than 3 miles
2. For a duration of up to 60 days on any continuous segment of the freeway/highway shorter than 3 miles

If the construction activities require existing detection systems to be nonoperational or off line for a longer time period or the spacing between traffic monitoring stations is more than the specified criteria above, and temporary or portable detection operations are not shown, the Contractor must provide provisions for temporary or portable detection operations. The Contractor must receive authorization on the type of detection and installation before installing the temporary or portable detection.

If existing TMS elements shown or identified during the pre-construction operational status check, except traffic monitoring stations, are damaged or fail due to the Contractor's activity, where the elements are not fully functional, the Engineer must be notified immediately. If the Contractor is notified by the Engineer that existing TMS elements have been damaged, have failed or are not fully functional due to the Contractor's activity, the damaged or failed TMS elements, excluding structure-related elements, must be repaired or replaced, at the Contractor's expense, within 24 hours. For a structure-related elements, the Contractor must install temporary or portable TMS elements within 24 hours. For nonstructure-related TMS elements, the Engineer may authorize temporary or portable TMS elements for use during the construction activities.

The Contractor must demonstrate that repaired or replaced elements operate in a manner equal to or better than the replaced equipment. If the Contractor fails to perform required repairs or replacement work, the Department may perform the repair or replacement work and the cost will be deducted from monies due to the Contractor.

A TMS element must be considered nonoperational or off line for the duration of time that active communications with the TMC is disrupted, resulting in messages and commands not transmitted from or to the TMS element.

The Contractor must provide provisions for replacing existing TMS elements within the project limits, including detection systems, that were not identified on the plans or during the pre-construction operational status check that became damaged due to the Contractor's activities.

If the pre-construction operational status check identified existing TMS elements, then the Contractor, the Engineer, and the Department's Traffic Operations Electrical representatives must jointly conduct a post construction operational status check of all existing TMS elements and each element's communication status with the TMC. The Department's Traffic Operations Electrical representatives will certify the TMS elements' status and provide a copy of the certified list of the existing TMS elements within the project limits to the Contractor. The status list will include the operational, defined as having full functionality, and the nonoperational components. TMS elements that cease to be functional between pre and post construction status checks must be repaired at the Contractor's expense.

The Engineer will authorize the schedule for final replacement, the replacement methods and the replacement elements, including element types and installation methods before repair or replacement work is performed. The final TMS elements must be new and of equal or better quality than the existing TMS elements.

If no electrical work exists on the project and no TMS elements are identified within the project limits, the pre-construction operational status check is change order work.

Furnishing and installing temporary or portable TMS elements that are not shown, but are required when an existing TMS element becomes nonoperational or off line due to construction activities, is change order work.

Furnishing and installing temporary or portable TMS elements and replacing TMS elements that are not shown nor identified during the pre-construction operational status check and were damaged by construction activities is change order work.

If the Contractor is required to submit provisions for the replacement of TMS elements that were not identified, submitting the provisions is change order work.

Add to section 86-2.05A:

Conduit installed underground must be Type 3.

Add to section 86-2.05B:

The conduit in a foundation and between a foundation and the nearest pull box must be Type 1 .

Add to section 86-2.05C:

If a standard coupling cannot be used for joining Type 1 conduit, use a UL-listed threaded union coupling under section 86-2.05C, a concrete-tight split coupling, or a concrete-tight set screw coupling.

If Type 3 conduit is placed in a trench, not in the pavement or under concrete sidewalk, after the bedding material is placed and the conduit is installed, backfill the trench to not less than 4 inches above the conduit with minor concrete under section 90-2, except the concrete must contain not less than 421 pounds of cementitious material per cubic yard. Backfill the remaining trench to finished grade with backfill material.

After conductors have been installed, the ends of the conduits terminating in pull boxes, service equipment enclosures, and controller cabinets must be sealed with an authorized type of sealing compound.

At locations where conduit is required to be installed under pavement and if a delay to vehicles will not exceed 5 minutes, conduit may be installed by the trenching in pavement method.

Replace the 3rd paragraph in section 86-2.06A(2) of the RSS for section 86-2.06 with:

In a ground or sidewalk area, embed the bottom of a pull box in crushed rock.

Replace "Reserved" in section 86-2.06B of the RSS for section 86-2.06 with:

86-2.06B(1) General

86-2.06B(1)(a) Summary

Section 86-2.06B includes specifications for installing non-traffic-rated pull boxes.

86-2.06B(1)(b) Submittals

Before shipping pull boxes to the job site, submit a list of materials used to fabricate the pull boxes to METS. Include:

1. Contract number
2. Manufacturer's name
3. Manufacturer's installation instructions
4. Your contact information

Submit reports for pull boxes from an NRTL-accredited laboratory.

Before installing a pull box and cover, submit the manufacturer's replacement warranty for them.

86-2.06B(1)(c) Quality Control and Assurance

86-2.06B(1)(c)(i) Functional Testing

The pull box and cover must be tested under ANSI/SCTE 77, "Specification for Underground Enclosure Integrity."

86-2.06B(1)(c)(ii) Warranty

Provide a 2-year manufacturer's replacement warranty for the pull box and cover. The warranty period starts on the date of Contract acceptance.

Deliver replacement parts within 5 business days after you receive notification of a failed pull box, cover, or both to the Department's Maintenance Electrical Shop at: 30 Richard Street, San Francisco, CA 94134

86-2.06B(2) Materials

The pull box and cover must comply with ANSI/SCTE 77, "Specification for Underground Enclosure Integrity," for tier 22 load rating and must be gray or brown.

Each pull box cover must have an electronic marker cast inside.

A pull box extension must be made of the same material as the pull box and attached to the box to maintain the minimum combined depths.

Include recesses for a hanger if a transformer or other device must be placed in a pull box.

The bolts, nuts, and washers must be a captive design.

The captive bolt must be capable of withstanding a torque from 55 to 60 ft-lb and a minimum pull-out strength of 750 lb. Perform the test with the cover in place and the bolts torqued. The pull box and cover must not be damaged while performing the test.

Hardware must be stainless steel with 18 percent chromium and 8 percent nickel content.

Galvanize ferrous metal parts under section 75-1.05.

The manufacturer's instructions must include:

1. Quantity and size of entries that can be made without degrading the strength of the pull box below the tier 22 load rating
2. Locations where side entries cannot be made
3. Acceptable method for creating the entry

The tier 22 load rating must be labeled or stenciled by the manufacturer on the inside and outside of the pull box and on the underside of the cover.

86-2.06B(3) Construction

Do not install a pull box in curb ramps or driveways.

A pull box for a post or a pole standard must be located within 5 feet of the standard. Place the pull box adjacent to the back of the curb or edge of the shoulder. If this is impractical, place the pull box in a suitable, protected, and accessible location.

**BID ITEM LIST
04-1SS034**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	130900	TEMPORARY CONCRETE WASHOUT	LS	LUMP SUM	LUMP SUM	
22	141120	TREATED WOOD WASTE	LB	11,300		
23	150203	ABANDON CULVERT (EA)	EA	2		
24	150230	DESTROY WELL	EA	2		
25	150661	REMOVE GUARDRAIL	LF	1,410		
26	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	10,700		
27	150768	REMOVE ASPHALT CONCRETE PAVEMENT (CY)	CY	300		
28	150820	REMOVE INLET	EA	2		
29	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	7,700		
30	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
31	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
32	190101	ROADWAY EXCAVATION	CY	8,140		
33	190185	SHOULDER BACKING	TON	47		
34 (F)	192049	STRUCTURE EXCAVATION (SOLDIER PILE WALL)	CY	4,146		
35 (F)	193029	STRUCTURE BACKFILL (SOLDIER PILE WALL)	CY	2,386		
36 (F)	193116	CONCRETE BACKFILL (SOLDIER PILE WALL)	CY	781		
37 (F)	193119	LEAN CONCRETE BACKFILL	CY	747		
38	210270	ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	6,700		
39	210300	HYDROMULCH	SQFT	54,000		
40	210350	FIBER ROLLS	LF	2,860		