

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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*Flex your power!
Be energy efficient!*

April 1, 2010

12-Ora-22,405-R0.7/R2.9,20.4/22.3
12-071624
ARRAL-X059(051)N
CMLN-6212(013)

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ORANGE COUNTY IN GARDEN GROVE, WESTMINSTER AND SEAL BEACH ON ROUTE 405 FROM 0.2 MILE SOUTH OF BOLSA CHICA ROAD OVERCROSSING TO 0.4 MILE SOUTH OF SEAL BEACH BOULEVARD OVERCROSSING AND ON ROUTE 22 FROM 2.0 MILES EAST OF BOLSA CHICA ROAD OVERCROSSING TO ROUTE 405/S405-E22 SEPARATION.

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, April 15, 2010.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book, and the Federal Minimum Wages with Modification Number 1 dated 03/26/10.

Project Plan Sheets 2, 147, 157, 158, 159, 160, 161, 162, 163, 169, 170, 228, 229, 230, 231, 232, 233, 234, 235, 236, 238, 239, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 269, 283, 290, 294, 368, 375, 377, 382, 383, 384, 385, 391, 392, 395, 396, 397, 400, 401, 479, 480, 481, 482, 752, 754, 756, 774, 789, 800, 808, 820, 821, 826, 829, 830, 845, 849, 865, 866, 867, 875, 879, 884, 887, 895, 897, 898, 905, 912, 919, 925, 928, 929, 938, 944, 945, 949, 953, 954, 955, 964, 969, 977, 978, 987, 991, 998, 999, and 1000 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 5-1.19, "RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD," the fourth paragraph is revised as follows:

"The Santa Ana RWQCB has issued a permit which governs storm water and non-storm water discharges resulting from construction activities in the project area. The RWQCB permit is entitled "General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (DeMinimus) Threat to Water Quality, Order No. R8-2009-0003, NPDES No. CAG998001." Copies of the RWQCB permit are available for review from District 12 Construction Office, 3337 Michelson Drive, Suite 100, Irvine, CA 92612-8894."

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In the Special Provisions, Section 5-1.21, "NONHIGHWAY FACILITIES (INCLUDING UTILITIES)," the third paragraph, item 2 is revised as follows:

2. Allowing at least the time shown for the utility owner to complete its work

Utility Installation and Contractor-Arranged Time for the Installation

Utility	Utility Address	Location	Days
Underground Electrical	Southern California Edison (SCE) 1241 S. Grand Ave. Building D Santa Ana, CA 92711 (714) 796-9819 (714) 796-9999 Fax	Bolsa Chica Road	21 days for bridge work
		Overcrossing and Valley View Street	21 days for road work

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the fourth paragraph is revised as follows:

"The area on the plans identified as "Permanent Highway Easement" is a work around area. The Contractor shall not enter the permanent highway easement at Navy Weapons Station Seal Beach until notified in writing by the Engineer. Access to the permanent highway easement is anticipated to be granted on November 28, 2010."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the seventh paragraph:

"SIDEWALK CLOSED signs shall be used to inform pedestrians of the temporary closing of sidewalks. Signs shall be installed at least 7 calendar days prior to closing the sidewalk, but not more than 14 days in advance of the sidewalk closure. The Contractor shall notify the Engineer not less than 2 calendar days prior to installing the signs."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," subsection "DESIGNATED PORTIONS OF WORK" is revised as follows:

"DESIGNATED PORTIONS OF WORK"

Attention is directed to Section 4, "Beginning of Work, Time of Completion, and Liquidated Damages," of these special provisions regarding incentive/disincentive payment of the designated portions of the work under this contract.

Valley View Street and Overcrossing: The designated portion of work shown under the stage construction plans is defined as all improvements between Station "VV" 33+00 and "VV" 50+97, including the removal and replacement of Bolsa Chica Road Overcrossing (Bridge No. 55-332/55-1102) and associated work. All improvements within the Valley View Street and Overcrossing designated portion of work shall be completed and open to traffic within 570 days of the designated start day. The designated start day of Valley View Street and Overcrossing is the 31st day after the first working day as defined in Section 4, "Beginning of Work, Time of Completion, and Liquidated Damages," of these special provisions.

Completion of Valley View Street and Overcrossing is designated as meeting the following:

1. The public, including vehicles and pedestrians, has full and unrestricted use and benefit of the facilities both from an operational and safety standpoint.
2. All safety features are installed and fully functional, including, but not limited to, illumination, signing, striping, barriers, guardrails, impact attenuators, delineators, and all other safety appurtenances.

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3. Only minor incidental work, replacement of temporary substitute facilities, and correction or repair remains for the physical completion of the Contract.
4. Any lane closures, sidewalk closures, or further delays, disruption or impediment to the public will be per the approval of the Engineer.

The provisions for "Incentive/Disincentive Payment" in Section 4, "Beginning of Work, Time of Completion and Liquidated Damages," of these special provisions shall apply to the above designated portions of work."

In the Special Provisions, Section 10-1.06, "TEMPORARY DRAINAGE FACILITIES," the fifteenth paragraph is revised as follows:

"Temporary culverts that will be connected to existing or permanent drainage pipe shall be connected with junction structures or concrete collars. Junction structures or concrete collar sizes shall be based on the size of the existing or permanent drainage pipe they will be joining."

In the Special Provisions, Section 10-1.07, "TEMPORARY CONCRETE WASHOUT FACILITY," is deleted.

In the Special Provisions, Section 10-1.075, "TEMPORARY CONCRETE WASHOUT BIN," is added as attached.

In the Special Provisions, Section 10-1.15, "COOPERATION," the first paragraph is revised as follows:

It is anticipated that work by another contractor may be in progress adjacent to or within the limits of this project during progress of the work on this contract. The following table lists contracts anticipated to be in progress during this contract.

Contract No.	Co-Rtes-PM	Location	Type of Work
12-071634	Ora-22-R0.3/R0.9; Ora-405-22.3/24.0; Ora-605- 3.0(Ora)/R1.6(LA)	405/605 HOV Connector	Highway construction
12-071614	Ora-22-R0.9/13.2	22/Valley View Street	Plant establishment period
12-0J5704	Ora-405-22.7	Seal Beach Boulevard	Overlay southbound off-ramp with open grade hot mix asphalt
		Naval Weapons Station Seal Beach	Access road and security fence

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In the Special Provisions, Section 10-1.21, "MAINTAINING TRAFFIC," lane closure charts 16 and 17 are added as attached.

In the Special Provisions, Section 10-1.21, "MAINTAINING TRAFFIC," the following paragraphs are added after the twenty-fifth paragraph:

"Pedestrian access facilities shall be provided through construction areas within the right of way as shown on the plans and as specified herein. Pedestrian walkways shall be surfaced with hot mix asphalt, portland cement concrete or timber. The surface shall be skid resistant and free of irregularities. Hand railings shall be provided on each side of pedestrian walkways as necessary to protect pedestrian traffic from hazards due to construction operations or adjacent vehicular traffic. Protective overhead covering shall be provided as necessary to insure protection from falling objects and drip from overhead structures.

In addition to the required openings through falsework, pedestrian facilities shall be provided during pile driving, footing, wall, and other bridge construction operations. At least one walkway shall be available at all times. If the Contractor's operations require the closure of one walkway, then another walkway shall be provided nearby, off the traveled roadway.

Railings shall be constructed of wood, S4S, and shall be painted white. Railings and walkways shall be maintained in good condition. Walkways shall be kept clear of obstructions.

At locations where an existing sidewalk is closed during work activities, a barrier that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk. Refer to Part 6 of the California MUTCD, Section 6H, figures 6H-28 and 6H-29.

Full compensation for providing pedestrian facilities 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."

In the Special Provisions, Section 10-1.32, "EXISTING HIGHWAY FACILITIES," subsection "SUBMITTALS" is added after subsection "ASBESTOS SURVEY" as follows:

"SUBMITTALS

Submit an Asbestos Compliance Plan (ACP). ACP must comply with Section 7-1.01A, "Asbestos Compliance Plan," of the Standard Specifications."

In the Special Provisions, Section 10-1.36, "EARTHWORK," the following paragraph is added after the fourth paragraph:

"Surplus excavated material not designated as hazardous waste due to aerially deposited lead shall become the property of the Contractor and shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications."

In the Special Provisions, Section 10-1.37, "LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE)," the third paragraph is revised as follows:

"The Contractor shall submit mix design(s) which will produce a cast density, at point of placement, of maximum 30 pcf with a minimum compressive strength of 60 psi at 28 days and a cast density, at point of placement, of maximum 42 pcf with a minimum compressive strength of 125 psi at 28 days, as shown on the plans. The Contractor shall submit to the Engineer for approval a Work Plan at least 30 working days prior to placement."

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In the Special Provisions, Section 10-1.38, "EMBANKMENT STRUCTURES," subsection "MEASUREMENT AND PAYMENT," the following paragraph is added after the fourth paragraph:

"Full compensation for treated permeable base to be placed under roadway sections at precast concrete walls with lightweight fill (cellular concrete) and to be placed around the slotted plastic pipe at the bottom of the geocomposite drain shall be considered as included in the contract price paid per square foot for precast concrete wall, and no separate payment will be made therefor."

In the Special Provisions, Section 10-1.475, "LEAN CONCRETE BASE RAPID SETTING," is added as attached.

In the Special Provisions, Section 10-1.555, "CONCRETE PAVEMENT JUST-IN-TIME-TRAINING," is added as attached.

In the Special Provisions, Section 10-2.04, "BLANK," is revised as attached.

In the Special Provisions, Section 10-2.05, "IRRIGATION SYSTEMS," subsection "GATE VALVES," the following paragraph is added after the first paragraph:

"Gate valves, smaller than 3 inches in size, shall be furnished with a cross-handle."

In the Bid book, in the "Bid Item List," Items 91, 137, and 169 are revised, Items 285, 286, and 287 are added and Items 11 and 284 are deleted as attached.

To Bid book holders:

Replace pages 3, 7, 9, 11 and 14 of the "Bid Item List" in the Bid book with the attached revised pages 3, 7, 9, 11 and 14 of the Bid Item List. The revised 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.

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This addendum, attachments and the modified wage rates are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/12/12-071624

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

IGNACIO SANCHEZ DEL REAL
Acting Office Chief
Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

10-1.075 TEMPORARY CONCRETE WASHOUT BIN

GENERAL

Summary

This work includes removal and disposal of concrete waste by furnishing, maintaining, and removing temporary concrete washout bins.

The SWPPP must describe and include the use of temporary concrete washout bins as a water pollution control practice for waste management and materials pollution control.

Submittals

At least 5 business days before concrete operations start, submit:

1. Location of the washout bins
2. Name and location of the off-site concrete waste disposal facility to receive concrete waste
3. Copy of the permit issued by RWQCB for the off-site commercial disposal facility
4. Copy of the license for the off-site commercial disposal facility
5. Copy of the permit issued by the state or local agency having jurisdiction over the disposal facility if the disposal site is located outside of the State of California

Quality Control and Assurance

Retain and submit records of disposed concrete waste including:

1. Weight tickets
2. Delivery and removal of concrete washout bins

MATERIALS

Concrete Washout Bin

Concrete washout bin must:

1. Be a commercially available watertight container
2. Have sufficient capacity to contain all liquid and concrete waste generated by washout operations without seepage or spills
3. Be not less than 5 cubic yards of capacity
4. Be a roll-off bin and may include folding steel ramps
5. Be labeled for the exclusive use as a concrete waste and washout facility

Concrete Washout Sign

Concrete washout sign must:

1. Comply with the provisions in Section 12-3.06B, "Portable Signs," of the Standard Specifications
2. Be approved by the Engineer
3. Consist of a base, framework, and a sign panel
4. Be made out of plywood
5. Be a minimum size of 2 feet by 4 feet
6. Read "Concrete Washout" with black letters, 3 inches high, on a white background

CONSTRUCTION

Placement

Place concrete washout bins at the job site:

1. Before concrete placement activities begin
2. In the immediate area of the concrete work as approved by the Engineer
3. No closer than 50 feet from storm drain inlets, open drainage facilities, ESAs, or watercourses
4. Away from construction traffic or public access areas

Install a concrete washout sign adjacent to each temporary concrete washout bin location.

Operation

Use concrete washout bins for:

1. Washout from concrete delivery trucks
2. Slurries containing portland cement concrete or hot mix asphalt from sawcutting, coring, grinding, grooving, and hydro-concrete demolition
3. Concrete waste from mortar mixing stations

Relocate concrete washout bins as needed for concrete construction work.

Replace concrete washout bins when filled to capacity. Do not fill higher than 6 inches below rim.

Your WPCM must inspect concrete washout bins:

1. Daily if concrete work occurs daily
2. Weekly if concrete work does not occur daily

Maintenance

When relocating or transporting a concrete washout bin within the project site, secure the concrete washout bin to prevent spilling of concrete waste material. If any spilled material is observed, remove the spilled material and place it into the concrete washout bin.

Removal

Dispose of concrete waste material at a facility specifically licensed to receive solid concrete waste, liquid concrete waste, or both. Remove and dispose of concrete waste within 2 days of the concrete washout bin becoming filled to capacity.

MEASUREMENT AND PAYMENT

Temporary concrete washout bin is measured by the actual count of concrete washout bins in place.

The contract unit price paid for temporary concrete washout bin includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, maintaining, and removing the concrete washout bin, including removal and disposal of concrete waste, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Chart No. 16 Complete Freeway Closure Hours																								
County: Ora					Route/Direction: EB and WB Route 22										PM: R0.7 to R 2.9									
Closure Limits: Knott Street to Route 405																								
FROM HOUR TO 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																								
Mondays through Thursdays																								
Fridays																								C
Saturdays					C	C	C	C	C	C	C													C
Sundays					C	C	C	C	C	C	C													
Legend:																								
<input type="checkbox"/> C Freeway or expressway may be closed completely.																								
<input type="checkbox"/> No complete freeway or expressway closure is permitted.																								
REMARKS: Extended closure for bridge demolition and falsework construction. Simultaneous full closure in both directions is prohibited.																								
Chart No. 17 Complete Freeway Closure Hours																								
County: Ora					Route/Direction: NB and SB Route 405										PM: 20.3 to 22.5									
Closure Limits: Westminster Boulevard to Seal Beach Boulevard																								
FROM HOUR TO 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																								
Mondays through Thursdays																								
Fridays																								C
Saturdays					C	C	C	C	C	C	C													C
Sundays					C	C	C	C	C	C	C													
Legend:																								
<input type="checkbox"/> C Freeway or expressway may be closed completely.																								
<input type="checkbox"/> No complete freeway or expressway closure is permitted.																								
REMARKS: Extended closure for bridge demolition and falsework construction. Simultaneous full closure in both directions is prohibited.																								

10-1.475 LEAN CONCRETE BASE RAPID SETTING

Lean concrete base rapid setting (LCBRS) shall conform to the provisions in Section 28, "Lean Concrete Base," of the Standard Specifications and these special provisions.

The Contractor shall determine the mix proportions, including cement content, for LCBRS. Cement for LCBRS shall be hydraulic cement as defined in ASTM Designation: C 219. Mineral admixtures shall not be used. LCBRS made with cement conforming to ASTM Designation: C-150 shall be cured with pigmented curing compound in conformance with the provisions in Section 40-3.13, "Curing." LCBRS made with cements that do not conform to ASTM Designation: C-150 shall be cured as recommended by the manufacturer of the cement.

Aggregate for LCBRS shall conform to the requirements of Sections 90-2.02, "Aggregates," and 90-3, "Aggregate Gradings," of the Standard Specifications. At the option of the Contractor, the combined aggregate grading may be either the 1 ½-inch maximum or the 1-inch maximum.

The Contractor shall use a nonchloride Type C accelerating chemical admixture or a Type E accelerating and water reducing chemical admixture. Chemical admixtures shall conform to the provisions in Section 90-4, "Admixtures," of the Standard Specifications. The Contractor shall be responsible for ensuring compatibility when more than one type of admixture is used. In addition to the admixtures listed on the Department's current list of approved admixtures, citric acid or borax may be used if requested in writing by the cement manufacturer and a sample is submitted to the Engineer. Air-entraining admixtures shall not be used.

Penetration requirements in Section 28-1.04, "Proportioning, Mixing and Transporting," of the Standard Specifications shall not apply.

MIX DESIGN

The Contractor shall design the LCBRS mix to meet an opening age compressive strength of 725 psi. LCBRS for compressive strength test specimens shall be prepared in accordance with ASTM Designation: C 192. Compressive strength test cylinders (6 inch x 6 inch) shall be fabricated, handled, cured and tested in accordance with items D8 and D9; and section E of California Test 548, except that an additional three cylinders shall be fabricated and tested for opening age strength. Opening age is defined as the age at which the LCBRS will achieve the specified strength prior to start of concrete paving (rapid strength concrete) paving operations. Prior to the start of paving operations, the Contractor shall submit a mix design showing the proportions of materials used and the compressive strength obtained from rapid concrete at opening age, and 7 days. The mix design shall include copies of test reports, including test dates, and a complete list of materials including type, brand, source, and amount of; cementitious material, coarse aggregate, fine aggregate, water, and admixtures. The penetration and the air content of the mix shall also be shown.

After the mix design is established, at least five samples of LCBRS shall be taken and tested for compressive strength using the established mix design. Each sample shall consist of four cylinders, two to be tested at opening age and two to be tested at 7 days. The standard deviation and average values of the test results shall be included in the submittal to the Engineer.

If a change in sources is made, or admixtures added or deleted from the mix, a new mix design shall be submitted to the Engineer for approval.

STRENGTH TESTING

During placement of LCBRS, the Contractor shall fabricate 6 inch x 6 inch cylinders and test for compressive strength for every 130 cubic yards of LCBRS placed. Test cylinders shall be fabricated in conformance with items D8 and D9 of California Test 548 and tested for compressive strength in conformance with California Test 521. Each compressive strength test shall consist of a minimum of two cylinders tested at opening age.

VOLUMETRIC PROPORTIONING

When LCBRS is proportioned by volume, the method shall conform to requirements specified herein.

Aggregates shall be handled and stored in conformance with the provisions in Section 90-5.01, "Storage of Aggregates," of the Standard Specifications. Liquid admixtures shall be proportioned in conformance with the provisions in Section 90-4.10, "Proportioning and Dispensing Liquid Admixtures," of the Standard Specifications.

Batch-mixer trucks shall be equipped to proportion cement, water, aggregate and additives by volume. Aggregate feeders shall be connected directly to the drive on the cement vane feeder. The cement feed rate shall be tied directly to the feed rate for the aggregate and other ingredients. Any change in the ratio of cement to aggregate shall be accomplished by changing the gate opening for the aggregate feed. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest full or partial revolution of the aggregate delivery belt.

Aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate delineated to the nearest quarter increment. The height of the gate opening shall be readily determinable. Cement shall be proportioned by a method that conforms to the accuracy requirements of these special provisions. Water shall be proportioned by a meter conforming to the provisions in Section 9, "Measurement and Payment," of the Standard Specifications and these special provisions.

Delivery rate of aggregate and cement per revolution of the aggregate feeder shall be calibrated at appropriate gate settings for each batch-mixer truck used on the project and for each aggregate source. Batch-mixer trucks shall be calibrated at 3 different aggregate gate settings that are commensurate with production needs. Two or more calibration runs shall be required at each of the different aggregate gate openings. The actual weight of material delivered for aggregate proportioning device calibrations shall be determined by a platform scale as specified in these special provisions.

Aggregate belt feeder shall deliver aggregate to the mixer with volumetric consistency so that deviation for any individual aggregate delivery rate check-run shall not exceed 1.0 percent of the mathematical average of all runs for the same gate opening and aggregate type. Each test run shall be at least 1,000 pounds. Fine aggregate used for calibration shall not be reused for device calibration.

At the time of batching, aggregates shall be dried or drained sufficiently to result in stable moisture content, so that no visible separation of water from aggregate takes place during the proportioning process. In no event shall the free moisture content of the fine aggregate at the time of batching exceed 8 percent of its saturated, surface-dry weight.

If separate supplies of aggregate material of the same size group with different moisture content or specific gravity or surface characteristics affecting workability are available at the proportioning plant, withdrawals shall be made from one supply exclusively and the materials therein completely exhausted before starting another supply.

Rotating and reciprocating equipment on batch-mixer trucks shall be covered with metal guards.

The cement proportioning system shall deliver cement to the mixer with a volumetric consistency so that the deviation for any individual delivery rate check-run shall not exceed 1.0 percent of the mathematical average of 3 runs of at least 1,000 pounds each. Cement used for calibration shall not be reused for device calibration.

Water meter accuracy shall be such that, when operating between 50 percent and 100 percent of production capacity, the difference between the indicated weight of water delivered and the actual weight delivered shall not exceed 1.5 percent of the actual weight for each of two individual runs of 300 gallons. The water meter shall be calibrated in conformance with the requirements of California Test 109 and shall be equipped with a resettable totalizer and display the operating rate.

Calibration tests for aggregate, cement and water proportioning devices shall be conducted with a platform scale located at the calibration site. Weighing of test run calibration material shall be performed on a platform scale having a maximum capacity not exceeding 2.75 tons with maximum graduations of one pound. The platform scale shall be error tested within 8 hours of calibration of batch-mixer truck proportioning devices. Error testing shall be performed with test weights conforming to California Test 109 and shall produce a witness scale that is within 2 graduations of the test weight load. The scale shall be available for use at the production site throughout the production period. Equipment needed for the calibration of proportioning systems shall remain available at the production site throughout the production period. A Certificate of Compliance in conformance with the provisions in Section 6 1.07, "Certificates of Compliance," shall be furnished with each delivery of aggregate, cement, and admixtures used for calibration tests and shall be submitted to the Engineer with a certified copies of the weight of each delivery. The Certificate of Compliance shall state that the source of materials used for the calibration tests is from the same source as to be used for the planned work. The Certificate of Compliance shall state that the material supplied conforms to the Standard Specifications and these special provisions and shall be signed by an authorized representative who shall have the authority to represent and act for the Contractor.

The batch-mixer truck shall be equipped so that an accuracy check can be made prior to the first operation for the project and at any other time as directed by the Engineer. Further calibration of proportioning devices shall be required every 30 days after production begins or when the source or type of any ingredient is changed. A spot calibration shall consist of calibration of the cement proportioning system only. A two run spot re-calibration of the cement proportioning system shall be performed each time 55 tons of cement has passed through the batch-mixer truck. Should the spot re-calibration of the cement proportioning system fall outside the limitations specified herein, a full calibration of the cement proportioning system shall be completed before the resumption of production.

Liquid admixtures shall be proportioned by a meter.

Cement storage shall be located immediately before the cement feeder and shall be equipped with a device that will automatically shut down the power to the cement feeder and aggregate belt feeder when the cement storage level is lowered to a point where less than 20 percent of the total volume is left in storage.

The Contractor shall furnish aggregate moisture determinations, made in conformance with the requirements of California Test 223, at least every 2 hours during proportioning and mixing operations. Moisture determinations shall be recorded and presented to the Engineer at the end of the production shift.

Each aggregate bin shall be equipped with a device that will automatically shut down the power to the cement feeder and the aggregate belt feeder when the aggregate discharge rate is less than 95 percent of the scheduled discharge rate of any bin.

Indicators specified herein shall be in working order prior to commencing proportioning and mixing operations and shall be visible when standing near the batch-mixer truck.

Identifying numbers of batch-mixer trucks shall be at least 3 inches in height, and be located on the front and rear of the vehicles.

Volumetric proportioned LCBRS shall be mixed in a mechanically operated mixer of adequate size and power for LCBRS to be placed. Mixers may be of the auger type and shall be operated uniformly at the mixing speed recommended by the manufacturer. Mixers that have an accumulation of hard concrete or mortar shall be removed from service until cleaned. Other types of mixers may be used provided mixing quality will meet the requirements of these special provisions.

Charge or rate of feed to the mixer shall not exceed that which will permit complete mixing of the materials. Dead areas in the mixer, where material does not move or is not sufficiently agitated, shall be corrected by a reduction in the volume of material or by other adjustments. The mixer shall be designed to provide sufficient mixing action and movement to produce properly mixed LCBRS. Mixing shall continue until a homogeneous mixture is produced at discharge from the mixer. There will be no lumps or evidence of non-dispersed cement at discharge from the mixer. No water will be added to the LCBRS after discharge from the mixer.

Equipment having components made of aluminum or magnesium alloys, which may have contact with plastic rapid setting concrete during mixing or transporting of LCBRS, shall not be used.

Ice shall not be used to cool LCBRS directly. When ice is used to cool water used in the mix, all of the ice shall be melted before entering the mixer.

Cement shall be proportioned and charged into the mixer by means that will result in no losses of cement due to wind, or due to accumulation on equipment, or other conditions which will vary the required quantity of cement.

Each mixer shall have a metal plate or plates, prominently attached, on which the following information is provided:

- A. Uses for which the equipment is designed.
- B. Manufacturer's guaranteed capacity of the mixer in terms of the volume of mixed concrete.
- C. Speed of rotation of the mixer.

Consistency and workability of mixed LCBRS when discharged at the delivery point shall be suitable for placement and consolidation.

Information generated by volumetric devices will not be used for payment calculations.

The device that controls the proportioning of cement, aggregate and water shall produce a log of production data. The log of production data shall consist of a series of snapshots captured at 15 minute intervals throughout the period of daily production. Each snapshot of production data shall be a register of production activity at that time and not a summation of the data over the preceding 15 minutes. The amount of material represented by each snapshot shall be the amount produced in the period of time from 7.5 minutes before to 7.5 minutes after the capture time. The daily log shall be submitted to the Engineer, in electronic or printed media, at the end of each production shift or as requested by the Engineer, and shall include the following:

- A. Weight of cement per revolution count.
- B. Weight of each aggregate size per revolution count.
- C. Gate openings for each aggregate size being used.
- D. Weight of water added to the concrete per revolution count.
- E. Moisture content of each aggregate size being used.
- F. Individual volume of all other admixtures per revolution count.
- G. Time of day.
- H. Day of week.
- I. Production start and stop times.
- J. Batch-mixer truck identification.
- K. Name of supplier.
- L. Specific type, size, or designation of concrete being produced.
- M. Source of the individual aggregate sizes being used.
- N. Source, brand and type of cement being used.
- O. Source, brand and type of individual admixtures being used.
- P. Name and signature of operator.

Required report items may be input by hand into a pre-printed form or captured and printed by the proportioning device. Electronic media containing recorded production data shall be presented in a tab delimited format on a CD or DVD. Each snapshot of the continuous production shall be followed by a line-feed carriage-return with allowances for sufficient fields to satisfy the amount of data required by these specifications. The reported data shall be in the above order and shall include data titles at least once per report.

MEASUREMENT AND PAYMENT

The contract price paid per cubic yard for lean concrete base rapid setting shall include full compensation for furnishing all labor, materials (including cement in the amount determined by the Contractor), tools, equipment and incidentals, and for doing all the work involved in constructing, sampling and testing LCBRS, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

If calibration of volumetric batch-trucks is performed more than 100 miles from the project limits, additional inspection expenses will be sustained by the State. Whereas it is and will be impracticable and extremely difficult to ascertain and determine the actual increase in these expenses, it is agreed that payment to the Contractor for LCBRS will be reduced \$1,000.

10-1.555 CONCRETE PAVEMENT JUST-IN-TIME-TRAINING

GENERAL

Summary

Your personnel required to attend the prepaving conference must also complete Just-In-Time-Training (JITT). JITT is a formal training class for the following pavement types:

Pavement Types for JITT
Jointed Plain Concrete Pavement
Concrete Pavement (Rapid Strength Concrete)

Submittals

At least 7 business days before JITT, submit the instructor's name and listed experience, the JITT facility's location, and 1 copy each of the course syllabus, handouts, and presentation materials.

The Engineer provides training evaluation forms and each attendee must complete them. Five business days after JITT, submit completed training evaluation forms to the Engineer and to:

Construction_Engineering_HQ@dot.ca.gov

Just-In-Time-Training

JITT must be:

1. At least 4 hours long
2. At your option, an extension of the prepaving conference
3. Conducted within 3 miles of the job site
4. Completed at least 20 days before you start paving activities
5. Conducted during normal working hours

Provide a JITT instructor who is experienced with the specified pavement construction methods, materials, and tests. The instructor must be neither your employee nor a Department field staff member. Upon JITT completion, the instructor must issue a certificate of completion to each participant.

The Engineer may waive training for personnel who have completed equivalent training within the 12 months preceding JITT. Submit certificates of completion for the equivalent training.

MEASUREMENT AND PAYMENT

The Engineer determines the costs for providing JITT under Section 9-1.03, "Force Account Payment," of the Standard Specifications, except no markups are added and you are paid for one half of the JITT cost. Costs for providing JITT include training materials, class site, and the JITT instructor including the JITT instructor's travel, lodging, meals and presentation materials. The Engineer does not pay your costs for attending JITT.

10-2.04 HIGHWAY PLANTING

The work performed in connection with highway planting shall conform to the provisions in Section 20-4, "Highway Planting," of the Standard Specifications and these special provisions.

ROADSIDE CLEARING

Prior to preparing planting areas or commencing irrigation trenching operations for planting areas, trash and debris shall be removed from these areas as required under Construction Site Management of these special provisions.

The project area shall be cleared as specified herein:

- A. Existing plants, where shown on the plans to be removed, shall be removed.
- B. At the option of the Contractor, removed trees and shrubs may be reduced to chips. Chipped material shall not be substituted for mulch, nor shall the chipped material be placed within areas to receive mulch.
- C. Weeds shall be killed and removed within the entire highway right of way, within the project limits, except for existing planting areas to be maintained, and excluding median areas, new and existing pavement, curb, sidewalk and other surfaced areas.
- D. Weeds in plant basins, including basin walls, shall be removed by hand pulling, after the plants have been planted.

After the initial roadside clearing is complete, additional roadside clearing work shall be performed as necessary to maintain the areas, as specified above, in a neat appearance until the start of the plant establishment period. This work shall include the following:

- A. Trash and debris shall be removed.
- B. Rodents shall be controlled.
- C. Weed growth shall be killed before the weeds reach the seed stage of growth or exceed 6 inches in length, whichever occurs first.

Weed Control

Weed control shall also conform to the following:

- A. Stolon type weeds shall be killed with glyphosate.
- B. Areas to be mowed shall be mowed when weed height exceeds 12 inches. Weeds shall be mowed to a height of 2 inches to 6 inches.
- C. Disposal of mowed material and killed weeds after initial roadside clearing will not be required, unless otherwise directed by the Engineer. When directed by the Engineer, mowed material and killed weeds shall be disposed of and the disposal will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

Roadside clearing work shall not include work required to be performed as clearing and grubbing as specified in Section 16, "Clearing and Grubbing," of the Standard Specifications.

PESTICIDES

Pesticides used to control weeds shall conform to the provisions in Section 20-4.026, "Pesticides," of the Standard Specifications. Except as otherwise provided in these special provisions, pesticide use shall be limited to the following materials:

Glyphosate
Ammonium Sulfate
Magnesium Chloride

Glyphosate shall be used to kill stolon type weeds.

Oxadiazon shall be of the emulsifiable concentration or wettable powder type, except when Oxadiazon is used under mulch in conformance with these special provisions.

Ammonium sulfate and magnesium chloride shall be used only in areas planted to *Carpobrotus* or *Delosperma*. Ammonium sulfate and magnesium chloride shall not be applied in a manner that allows the pesticides to come in contact with trees or shrubs.

If the Contractor elects to request the use of other pesticides on this project, the request shall be submitted, in writing, to the Engineer not less than 15 days prior to the intended use of the other pesticides. Except for the pesticides listed in these special provisions, no pesticides shall be used or applied without prior written approval of the Engineer.

Pesticides shall not be applied within the limits of the plant basins. Pesticides shall not be applied in a manner that allows the pesticides to come in contact with the foliage and woody parts of the plants.

The contract lump sum price paid for roadside clearing shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in roadside clearing, complete in place, including pesticides, as shown on the plans as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

BID ITEM LIST
12-071624

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070012	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
2	070013	SMALL BUSINESS UTILIZATION REPORT	EA	15	250.00	3,750.00
3	070018	TIME-RELATED OVERHEAD	WDAY	1,260		
4	072006	TEMPORARY SUPPORT	LS	LUMP SUM	LUMP SUM	
5	017554	TEMPORARY DRAINAGE FACILITIES	LS	LUMP SUM	LUMP SUM	
6	074016	CONSTRUCTION SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
7	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
8	074026	TEMPORARY MULCH	SQYD	10,000		
9	074028	TEMPORARY FIBER ROLL	LF	59,400		
10	074029	TEMPORARY SILT FENCE	LF	23,900		
11	BLANK					
12	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	34		
13	074035	TEMPORARY CHECK DAM	LF	5,830		
14	074037	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	8		
15	074038	TEMPORARY DRAINAGE INLET PROTECTION	EA	410		
16	074041	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
17	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
18	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
19	120120	TYPE III BARRICADE	EA	7		
20	120149	TEMPORARY PAVEMENT MARKING (PAINT)	SQFT	3,270		

BID ITEM LIST
12-071624

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	017559	EROSION CONTROL (HYDROSEED) SEED TYPE 2	SQFT	311,000		
82	203026	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	3		
83	204096	MAINTAIN EXISTING PLANTED AREAS	LS	LUMP SUM	LUMP SUM	
84	206401	MAINTAIN EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	LUMP SUM	
85	208000	IRRIGATION SYSTEM	LS	LUMP SUM	LUMP SUM	
86	042278	3" WATER SUPPLY LINE (BRIDGE)	LF	426		
87	208738	8" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT	LF	530		
88	208808	8" WELDED STEEL PIPE CONDUIT (.250" THICK)	LF	64		
89	208906	EXTEND 8" CONDUIT	LF	22		
90	260201	CLASS 2 AGGREGATE BASE	CY	16,200		
91	280000	LEAN CONCRETE BASE	CY	14,800		
92	390131	HOT MIX ASPHALT	TON	24,700		
93	394060	DATA CORE	LS	LUMP SUM	LUMP SUM	
94	394073	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF	420		
95	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	340		
96	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	5,520		
97	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	4,690		
98	394090	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SQYD	3,860		
99	397005	TACK COAT	TON	22		
100	401050	JOINTED PLAIN CONCRETE PAVEMENT	CY	29,600		

BID ITEM LIST
12-071624

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	519092	JOINT SEAL ASSEMBLY (MR 2 1/2")	LF	262		
122	519099	JOINT SEAL ASSEMBLY (MR 6")	LF	291		
123	519118	JOINT SEAL ASSEMBLY (MR 9")	LF	60		
124 (F)	520101	BAR REINFORCING STEEL	LB	1,272		
125 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	6,160,407		
126 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	31,005		
127 (F)	520107	BAR REINFORCING STEEL (BOX CULVERT)	LB	62,466		
128 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	388,050		
129 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	388,050		
130	560244	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	5,000		
131	560245	FURNISH LAMINATED PANEL SIGN (1"-TYPE B)	SQFT	35		
132	560246	FURNISH LAMINATED PANEL SIGN (2 1/2"-TYPE B)	SQFT	500		
133	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	840		
134	560249	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	760		
135	560251	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	120		
136	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	490		
137	561016	60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	430		
138	562002	METAL (BARRIER MOUNTED SIGN)	LB	850		
139	017561	METAL (SOUND WALL MOUNTED SIGN)	LB	490		
140	566011	ROADSIDE SIGN - ONE POST	EA	63		

**BID ITEM LIST
12-071624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	729010	ROCK SLOPE PROTECTION FABRIC	SQYD	330		
162	731501	MINOR CONCRETE (CURB)	CY	250		
163	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	CY	100		
164	731521	MINOR CONCRETE (SIDEWALK)	CY	100		
165	017563	MINOR CONCRETE (EXPOSED ROCK CONCRETE)	SQYD	5,500		
166	731623	MINOR CONCRETE (CURB RAMP)	CY	5		
167 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	110,215		
168 (F)	750498	MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE)	LB	12,672		
169 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	1,941		
170	017564	8" DUCTILE IRON PIPE	LF	60		
171 (F)	750505	BRIDGE DECK DRAINAGE SYSTEM	LB	65,918		
172	800360	CHAIN LINK FENCE (TYPE CL-6)	LF	730		
173	820101	MARKER	EA	3		
174	017565	DELINEATOR (METAL BEAM GUARD RAILING)	EA	8		
175	820107	DELINEATOR (CLASS 1)	EA	110		
176	832003	METAL BEAM GUARD RAILING (WOOD POST)	LF	10,200		
177	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	5,140		
178 (F)	833032	CHAIN LINK RAILING (TYPE 7)	LF	416		
179 (F)	833142	CONCRETE BARRIER (TYPE 26 MODIFIED)	LF	416		
180	839521	CABLE RAILING	LF	630		

**BID ITEM LIST
12-071624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
281	017625	COPPER-THEFT PREVENTION	LS	LUMP SUM	LUMP SUM	
282	869075	SYSTEM TESTING AND DOCUMENTATION	LS	LUMP SUM	LUMP SUM	
283	869080	TRAINING	LS	LUMP SUM	LUMP SUM	
284	BLANK					
285	074043	TEMPORARY CONCRETE WASHOUT BIN	EA	60		
286	018773	LEAN CONCRETE BASE RAPID SETTING	CY	130		
287	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____